Serve data from a SnapMirror DR destination volume

ONTAP 9

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Serve data from a SnapMirror DR destination volume

Make the destination volume writeable

When disaster disables the primary site for a SnapMirror DR relationship, you can serve data from the destination volume with minimal disruption. You can reactivate the source volume when service is restored at the primary site.

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 specify the Element source path in the form *`hostip:`*`/lun/`*`name`*, where “lun” is the actual string “lun” and `name` is the name of the Element volume.

Steps

1. Stop scheduled transfers to the destination:

   `snapmirror quiesce -source-path` *`hostip:`*`/lun/`*`name`* `-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 `0005` at IP address 10.0.0.11 and the destination volume `volA_dst` on `svm_backup`:

   ```
   cluster_dst::> snapmirror quiesce -source-path 10.0.0.11:/lun/0005
   -destination-path svm_backup:volA_dst
   ```

2. Stop ongoing transfers to the destination:

   `snapmirror abort -source-path` *`hostip:`*`/lun/`*`name`* `-destination-path` *`SVM:volume`* `|`*`cluster://SVM/volume`*

   For complete command syntax, see the man page.

   The following example stops ongoing transfers between the source volume `0005` at IP address 10.0.0.11 and the destination volume `volA_dst` on `svm_backup`:

   ```
   cluster_dst::> snapmirror abort -source-path 10.0.0.11:/lun/0005
   -destination-path svm_backup:volA_dst
   ```

3. Break the SnapMirror DR relationship:

`snapmirror break -source-path hostip:/lun/name -destination-path SVM:volume|cluster://SVM/volume`

For complete command syntax, see the man page.

The following example breaks the relationship between the source volume `0005` at IP address 10.0.0.11 and the destination volume `volA_dst` on `svm_backup` and the destination volume `volA_dst` on `svm_backup`:

```
cluster_dst::> snapmirror break -source-path 10.0.0.11:/lun/0005
-destination-path svm_backup:volA_dst
```

Configure the destination volume for data access

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

1. Map the Element LUN to the appropriate initiator group.
2. 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 LUN.

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.

You must specify the Element source path in the form *hostip:*/lun/*name*, where “lun” is the actual string “lun” and `name` is the name of the Element volume.

Beginning with ONTAP 9.4, Snapshot copies of a LUN created while you are serving data from the ONTAP destination are automatically replicated when the Element source is reactivated.

Replication rules are as follows:

- Only iSCSI LUNs are supported.
- You cannot replicate more than one LUN from an ONTAP volume to an Element volume.
- You cannot replicate a LUN from an ONTAP volume to multiple Element volumes.

Steps

1. Delete the original data protection relationship:

```
snapmirror delete -source-path SVM:volume|cluster://SVM/volume -destination
-path hostip:/lun/name -policy policy
```

For complete command syntax, see the man page.

The following example deletes the relationship between the original source volume, `0005` at IP address 10.0.0.11, and the volume you are serving data from, `volA_dst` on `svm_backup`:

```
cluster_dst::> snapmirror delete -source-path 10.0.0.11:/lun/0005
-policy MirrorLatest -destination-path svm_backup:volA_dst
```

2. Reverse the original data protection relationship:

```
snapmirror resync -source-path SVM:volume|cluster://SVM/volume -destination
-path hostip:/lun/name -policy policy
```

For complete command syntax, see the man page.

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 following example reverses the relationship between the original source volume, `0005` at IP address 10.0.0.11, and the volume you are serving data from, `volA_dst` on `svm_backup`:

```
cluster_dst::> snapmirror resync -source-path svm_backup:volA_dst
-destination-path 10.0.0.11:/lun/0005 -policy MirrorLatest
```

3. Update the reversed relationship:

```
snapmirror update -source-path SVM:volume|cluster://SVM/volume -destination
-path hostip:/lun/name
```

For complete command syntax, see the man page.

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 updates the relationship between the volume you are serving data from, `volA_dst` on `svm_backup`, and the original source volume, `0005` at IP address 10.0.0.11:

```
cluster_dst::> snapmirror update -source-path svm_backup:volA_dst
-destination-path 10.0.0.11:/lun/0005
```

4. Stop scheduled transfers for the reversed relationship:

```
snapmirror quiesce -source-path SVM:volume|cluster://SVM/volume -destination
-path hostip:/lun/name
```

For complete command syntax, see the man page.

The following example stops scheduled transfers between the volume you are serving data from, `volA_dst` on `svm_backup`, and the original source volume, `0005` at IP address 10.0.0.11:

```
cluster_dst::> snapmirror quiesce -source-path svm_backup:volA_dst
-destination-path 10.0.0.11:/lun/0005
```

5. Stop ongoing transfers for the reversed relationship:

   `snapmirror abort -source-path` *`SVM:volume`*|*`cluster://SVM/volume`* `-destination -path` *`hostip:`*`/lun/`*`name`*

   For complete command syntax, see the man page.

   The following example stops ongoing transfers between the volume you are serving data from, `volA_dst` on `svm_backup`, and the original source volume, `0005` at IP address 10.0.0.11:

   ```
   cluster_dst::> snapmirror abort -source-path svm_backup:volA_dst
   -destination-path 10.0.0.11:/lun/0005
   ```

6. Break the reversed relationship:

   `snapmirror break -source-path` *`SVM:volume`*|*`cluster://SVM/volume`* `-destination -path` *`hostip:`*`/lun/`*`name`*

   For complete command syntax, see the man page.

   The following example breaks the relationship between the volume you are serving data from, `volA_dst` on `svm_backup`, and the original source volume, `0005` at IP address 10.0.0.11:

   ```
   cluster_dst::> snapmirror break -source-path svm_backup:volA_dst
   -destination-path 10.0.0.11:/lun/0005
   ```

7. Delete the reversed data protection relationship:

   `snapmirror delete -source-path` *`SVM:volume`*|*`cluster://SVM/volume`* `-destination -path` *`hostip`*`:/lun/`*`name`* `-policy` *`policy`*

   For complete command syntax, see the man page.

   The following example deletes the reversed relationship between the original source volume, `0005` at IP address 10.0.0.11, 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 10.0.0.11:/lun/0005 -policy MirrorLatest
   ```

8. Reestablish the original data protection relationship:

   `snapmirror resync -source-path` *`hostip`*`:/lun/`*`name`* `-destination-path` *`SVM:volume|cluster://SVM/volume`*

   For complete command syntax, see the man page.

   The following example reestablishes the relationship between the original source volume, `0005` at IP address 10.0.0.11, and the original destination volume, `volA_dst` on `svm_backup`:

   ```
   cluster_dst::> snapmirror resync -source-path 10.0.0.11:/lun/0005
   -destination-path svm_backup:volA_dst
   ```

After you finish

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

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