Reactivate the source SVM

ONTAP 9

NetApp
November 28, 2022
Table of Contents

Reactivate the source SVM .................................................. 1
  Source SVM reactivation workflow ........................................ 1
Reactivate the original source SVM ........................................ 1
Reactivate the original source SVM (FlexGroup volumes only) ........ 5
Reactivate the source SVM

Source SVM reactivation workflow

If the source SVM exists after a disaster, you can reactivate it and protect it by recreating the SVM disaster recovery relationship.

1. Create a SnapMirror relationship.
2. Resynchronize the source SVM from the destination SVM.
3. Stop the destination SVM.
4. Update the SnapMirror relationship.
5. Break the SVM DR relationship.
6. Start the source SVM.
7. Resynchronize the destination SVM from the source SVM.

Reactivate the original source SVM

You can reestablish the original data protection relationship between the source and destination SVM when you no longer need to serve data from the destination. The procedure is largely identical to the procedure for volume replication, with one exception. You must stop the destination SVM before reactivating the source SVM.

What you'll need

If you have increased the size of destination volume while serving data from it, before you reactivate the source volume, you should manually increase max-autosize on the original source volume to ensure it can grow sufficiently.

When a destination volume grows automatically

About this task

Beginning with ONTAP 9.11.1, you can reduce resynchronization time during a disaster recovery rehearsal by
using the -quick-resync true option of the snapmirror resync command while performing a reverse resync of an SVM DR relationship. A quick resync can reduce the time it takes to return to production by bypassing the data warehouse rebuild and restore operations.

Quick resync does not preserve the storage efficiency of the destination volumes. Enabling quick resync might increase the volume space used by the destination volumes.

This procedure 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.

For complete command syntax on commands, see the man page.

Steps

1. From the original source SVM or the original source cluster, create a reverse SVM DR relationship using the same configuration, policy, and identity-preserver setting as the original SVM DR relationship:

   ```bash
   snapmirror create -source-path SVM: -destination-path SVM:
   ```

   You must enter a colon (:) after the SVM name in the -source-path and -destination-path options. See the example below.

   The following example creates a relationship between the SVM from which you are serving data, svm_backup, and the original source SVM, svm1:

   ```bash
   cluster_src::> snapmirror create -source-path svm_backup: -destination-path svm1:
   ```

2. From the original source SVM or the original source cluster, run the following command to reverse the data protection relationship:

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

   You must enter a colon (:) after the SVM name in the -source-path and -destination-path options. See the example below.

   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 reinitialize the relationship.

   The following example reverses the relationship between the original source SVM, svm1, and the SVM from which you are serving data, svm_backup:

   ```bash
   cluster_src::> snapmirror resync -source-path svm_backup: -destination-path svm1:
   ```
Example using -quick-resync option:

```
classroom src::> snapmirror resync -source-path svm_backup: -destination-path svml: -quick-resync true
```

3. When you are ready to reestablish data access to the original source SVM, stop the original destination SVM to disconnect any clients currently connected to the original destination SVM.

```
vserv vstop -vserv SVM
```

The following example stops the original destination SVM which is currently serving data:

```
classroom dst::> vserv stop svm_backup
```

4. Verify that the original destination SVM is in the stopped state by using the `vserv show` command.

```
classroom dst::> vserv show

<table>
<thead>
<tr>
<th>Vserver</th>
<th>Type</th>
<th>Subtype</th>
<th>Admin State</th>
<th>Operational State</th>
<th>Root Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>svm_backup</td>
<td>data</td>
<td>default</td>
<td>stopped</td>
<td>stopped</td>
<td>rv</td>
</tr>
</tbody>
</table>
```

5. From the original source SVM or the original source cluster, run the following command to perform the final update of the reversed relationship to transfer all changes from the original destination SVM to the original source SVM:

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

You must enter a colon (:) after the SVM name in the `-source-path` and `-destination-path` options. See the example below.

The following example updates the relationship between the original destination SVM from which you are serving data, svm_backup, and the original source SVM, svm1:

```
classroom src::> snapmirror update -source-path svm_backup: -destination-path svm1:
```

6. From the original source SVM or the original source cluster, run the following command to stop scheduled transfers for the reversed relationship:

```
snapmirror quiesce -source-path SVM: -destination-path SVM:
```
You must enter a colon (:) after the SVM name in the -source-path and -destination-path options. See the example below.

The following example stops scheduled transfers between the SVM you are serving data from, svm_backup, and the original SVM, svml:

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

7. 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:

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

You must enter a colon (:) after the SVM name in the -source-path and -destination-path options. See the example below.

The following example breaks the relationship between the original destination SVM from which you were serving data, svm_backup, and the original source SVM, svml:

```bash
cluster_src::> snapmirror break -source-path svm_backup: -destination-path svml:
```

8. If the original source SVM was previously stopped, from the original source cluster, start the original source SVM:

```bash
vserver start -vserv SVM
```

The following example starts the original source SVM:

```bash
cluster_src::> vserver start svml
```

9. From the original destination SVM or the original destination cluster, reestablish the original data protection relationship:

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

You must enter a colon (:) after the SVM name in the -source-path and -destination-path options. See the example below.

The following example reestablishes the relationship between the original source SVM, svml, and the original destination SVM, svm_backup:
10. From the original source SVM or the original source cluster, run the following command to delete the reversed data protection relationship:

```
cluster_dst::> snapmirror delete -source-path SVM: -destination-path SVM:
```

You must enter a colon (:) after the SVM name in the -source-path and -destination-path options. See the example below.

The following example deletes the reversed relationship between the original destination SVM, svm_backup, and the original source SVM, svm1:

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

11. From the original destination SVM or the original destination cluster, release the reversed data protection relationship:

```
cluster_src::> snapmirror release -source-path SVM: -destination-path SVM:
```

You must enter a colon (:) after the SVM name in the -source-path and -destination-path options. See the example below.

The following example releases the reversed relationship between the original destination SVM, svm_backup, and the original source SVM, svm1:

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

After you finish

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

**Reactivate the original source SVM (FlexGroup volumes only)**

You can reestablish the original data protection relationship between the source and destination SVM when you no longer need to serve data from the destination. To reactivate the original source SVM when you are using FlexGroup volumes, you need to perform some additional steps, including deleting the original SVM DR relationship and releasing the original relationship before you reverse the relationship. You also need to
release the reversed relationship and recreate the original relationship before stopping scheduled transfers.

Steps

1. From the original destination SVM or the original destination cluster, delete the original SVM DR relationship:

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

   You must enter a colon (:) after the SVM name in the -source-path and -destination-path options. See the example below.

   The following example deletes the original relationship between the original source SVM, svm1, and the original destination SVM, svm_backup:

   ```
   cluster_dst::> snapmirror delete -source-path svm1: -destination-path svm_backup:
   ```

2. From the original source SVM or the original source cluster, release the original relationship while keeping the Snapshot copies intact:

   snapmirror release -source-path SVM: -destination-path SVM: -relationship-info-only true

   You must enter a colon (:) after the SVM name in the -source-path and -destination-path options. See the example below.

   The following example releases the original relationship between the original source SVM, svm1, and the original destination SVM, svm_backup:

   ```
   cluster_src::> snapmirror release -source-path svm1: -destination-path svm_backup: -relationship-info-only true
   ```

3. From the original source SVM or the original source cluster, create a reverse SVM DR relationship using the same configuration, policy, and identity-preserve setting as the original SVM DR relationship:

   snapmirror create -source-path SVM: -destination-path SVM:

   You must enter a colon (:) after the SVM name in the -source-path and -destination-path options. See the example below.

   The following example creates a relationship between the SVM from which you are serving data, svm_backup, and the original source SVM, svm1:
4. From the original source SVM or the original source cluster, run the following command to reverse the data protection relationship:

```bash
cluster_src::> snapmirror resync -source-path SVM: -destination-path SVM:
```

- You must enter a colon (:) after the SVM name in the `-source-path` and `-destination-path` options. See the example below.

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 reinitialize the relationship.

The following example reverses the relationship between the original source SVM, `svm1`, and the SVM from which you are serving data, `svm_backup`:

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

5. When you are ready to reestablish data access to the original source SVM, stop the original destination SVM to disconnect any clients currently connected to the original destination SVM.

```bash
vserver stop -vserver SVM
```

The following example stops the original destination SVM which is currently serving data:

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

6. Verify that the original destination SVM is in the stopped state by using the `vserver show` command.

```bash
cluster_dst::> vserver show
```

```
Vserver Aggregate Admin Operational Root
Type Subtype State State Volume
---------- -------- -------- ---------- ----------
svm_backup data default stopped stopped rv
```

7. From the original source SVM or the original source cluster, run the following command to perform the final
update of the reversed relationship to transfer all changes from the original destination SVM to the original source SVM:

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

You must enter a colon (:) after the SVM name in the `-source-path` and `-destination-path` options. See the example below.

The following example updates the relationship between the original destination SVM from which you are serving data, `svm_backup`, and the original source SVM, `svm1`:

```
cluster_src::> snapmirror update -source-path svm_backup: -destination-path svm1:
```

8. From the original source SVM or the original source cluster, run the following command to stop scheduled transfers for the reversed relationship:

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

You must enter a colon (:) after the SVM name in the `-source-path` and `-destination-path` options. See the example below.

The following example stops scheduled transfers between the SVM you are serving data from, `svm_backup`, and the original SVM, `svm1`:

```
cluster_src::> snapmirror quiesce -source-path svm_backup: -destination-path svm1:
```

9. 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: -destination-path SVM:
```

You must enter a colon (:) after the SVM name in the `-source-path` and `-destination-path` options. See the example below.

The following example breaks the relationship between the original destination SVM from which you were serving data, `svm_backup`, and the original source SVM, `svm1`:

```
cluster_src::> snapmirror break -source-path svm_backup: -destination-path svm1:
```

10. If the original source SVM was previously stopped, from the original source cluster, start the original source SVM:
vserver start -vserver SVM

The following example starts the original source SVM:

```bash
cluster_src::> vserver start svm1
```

11. From the original source SVM or the original source cluster, delete the reversed SVM DR relationship:

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

You must enter a colon (:) after the SVM name in the `-source-path` and `-destination-path` options. See the example below.

The following example deletes the reversed relationship between the original destination SVM, `svm_backup`, and the original source SVM, `svm1`:

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

12. From the original destination SVM or the original destination cluster, release the reversed relationship while keeping the Snapshot copies intact:

```bash
snapmirror release -source-path SVM: -destination-path SVM: -relationship-info-only true
```

You must enter a colon (:) after the SVM name in the `-source-path` and `-destination-path` options. See the example below.

The following example releases the reversed relationship between the original destination SVM, `svm_backup`, and the original source SVM, `svm1`:

```bash
cluster_dst::> snapmirror release -source-path svm_backup: -destination-path svm1: -relationship-info-only true
```

13. From the original destination SVM or the original destination cluster, recreate the original relationship. Use the same configuration, policy, and identity-preserve setting as the original SVM DR relationship:

```bash
snapmirror create -source-path SVM: -destination-path SVM:
```

You must enter a colon (:) after the SVM name in the `-source-path` and `-destination-path` options. See the example below.

The following example creates a relationship between the original source SVM, `svm1`, and the original destination SVM, `svm_backup`:
14. From the original destination SVM or the original destination cluster, reestablish the original data protection relationship:

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

You must enter a colon (:) after the SVM name in the -source-path and -destination-path options. See the example below.

The following example reestablishes the relationship between the original source SVM, svm1, and the original destination SVM, svm_backup:

    cluster_dst::> snapmirror resync -source-path svm1: -destination-path svm_backup: