



# **Reactivate the source SVM**

## **ONTAP 9**

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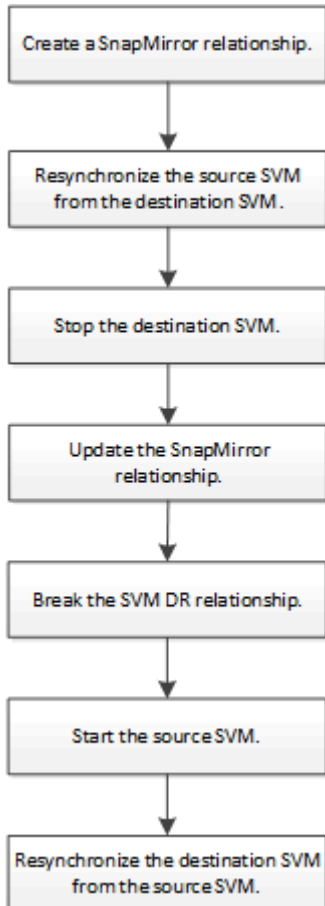
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# Reactivate the source SVM

## 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.



## 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.

### Before you begin

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 CLI `-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.

Beginning with ONTAP 9.8, you can use System Manager to reactivate a source storage VM after a disaster. Reactivating the source storage VM stops the destination storage VM, and it reenables replication from the source to the destination.


When you use System Manager to reactivate the source storage VM, System Manager performs the following operations in the background:

- Creates a reverse SVM DR relationship from the original destination to original source using SnapMirror resync
- Stops the destination SVM
- Updates the SnapMirror relationship
- Breaks the SnapMirror relationship
- Restarts the original SVM
- Issues a SnapMirror resync of the original source back to the original destination
- Cleans up the SnapMirror relationships

## Steps

You can perform this task from System Manager or the ONTAP CLI.

## System Manager

1. From the destination cluster, click **Protection > Relationships**, and locate the desired protection relationship.
2. Hover over the source relationship name, click , and select **Reactivate Source Storage VM**.
3. In the **Reactivate source storage VM** window, click **Reactivate**.
4. Under **Relationships**, monitor the source reactivation progress by viewing **Transfer Status** for the protection relationship. When reactivation is complete, the relationship state should return to "Mirrored".

## CLI

1. 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`:

```
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:

```
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`:

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

Example using -quick-resync option:

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

```
vserver stop -vserver <SVM>
```

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

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

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

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

| Vserver    | Type  | Subtype | Admin State | Operational State | Root Volume |
|------------|-------|---------|-------------|-------------------|-------------|
| Aggregate  |       |         |             |                   |             |
| -----      | ----- | -----   | -----       | -----             | -----       |
| -----      |       |         |             |                   |             |
| svm_backup | data  | default | stopped     | stopped           | rv          |
| aggr1      |       |         |             |                   |             |

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`:

```
cluster_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, `svm1`:

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

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:

```
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:
```

8. 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:

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

9. 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:
```

10. From the original source SVM or the original source cluster, run the following command to delete the reversed data protection 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 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:

```
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`:

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

4. From the original source SVM or the original source cluster, run the following command to reverse the 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.

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`:

```
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.

```
vserver stop -vserver SVM
```

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

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

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

```
cluster_dst:> vservers show
```

| Vserver    | Type  | Subtype | Admin State | Operational State | Root Volume |
|------------|-------|---------|-------------|-------------------|-------------|
| Aggregate  |       |         |             |                   |             |
| -----      | ----- | -----   | -----       | -----             | -----       |
| svm_backup | data  | default | stopped     | stopped           | rv          |
| aggr1      |       |         |             |                   |             |

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:

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

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

12. From the original destination SVM or the original destination cluster, release the reversed 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 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: -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:

```
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`:

```
cluster_dst:> snapmirror create -source-path svm1: -destination-path  
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:
```

## Resynchronize a destination storage VM

Beginning with ONTAP 9.8, you can use System Manager to resynchronize the data and configuration details from the source storage VM to the destination storage VM in a broken protection relationship and reestablish the relationship.


ONTAP 9.11.1 introduces an option to bypass a full data warehouse rebuild when you perform a disaster recovery rehearsal, enabling you to return to production faster.

You perform the resync operation only from the destination of the original relationship. The resync deletes any data in the destination storage VM that is newer than the data in the source storage VM.

### Steps

You can use System Manager or the ONTAP CLI to perform this task.

## System Manager

1. From the destination, select the desired protection relationship: click **Protection > Relationships**.
2. Optionally, select **Perform a quick resync** to bypass a full data warehouse rebuild during a disaster recovery rehearsal.
3. Click  and click **Resync**.
4. Under **Relationships**, monitor the resynchronization progress by viewing **Transfer Status** for the relationship.

## CLI

1. From the destination cluster, resynchronize the relationship:

```
snapmirror resync -source-path <svm>: -destination-path <svm>:  
-quick-resync true|false
```

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