



# **Serve data from a SnapMirror DR destination volume**

**ONTAP 9**

NetApp  
June 04, 2024

# Table of Contents

- Serve data from a SnapMirror DR destination volume . . . . . 1
  - Make the destination volume writeable . . . . . 1
  - Configure the destination volume for data access . . . . . 2
  - Reactivate the original source volume . . . . . 2

# 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:

```
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`:

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

2. Stop ongoing transfers to the destination:

```
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`:

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

3. Break the SnapMirror DR relationship:

```
snapmirror break -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 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

To perform these tasks with...	See this content...
The redesigned System Manager (available with ONTAP 9.7 and later)	<a href="#">Serve data from a SnapMirror destination</a>
System Manager Classic (available with ONTAP 9.7 and earlier)	<a href="#">Volume disaster recovery overview</a>

## 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 `svm1`:

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

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

```
cluster_scr::> snapmirror break -source-path svm_backup:volA_dst  
-destination-path svm1: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.



## Copyright information

Copyright © 2024 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

## Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.