



Perform IP MetroCluster switchover and switchback

ONTAP 9

[netapp-aherbin], Thom Illingworth
October 23, 2020

This PDF was generated from https://docs.netapp.com/us-en/ontap/task_metrocluster_switchover_switchback.html on May 13, 2021. Always check docs.netapp.com for the latest.

Table of Contents

- Perform IP MetroCluster switchover and switchback 1
 - Overview of switchover and switchback 1
 - Use System Manager 9.7 for switchover and switchback 1
 - Use System Manager 9.8 for switchover and switchback 2

Perform IP MetroCluster switchover and switchback

You can switch over control from one IP MetroCluster site to the other to perform maintenance or recover from an issue.



Switchover and switchback procedures are supported only for IP MetroCluster configurations.

Overview of switchover and switchback

A switchover can occur in two instances:

- **A planned switchover**

This switchover is initiated by a system administrator using System Manager. The planned switchover allows a system administrator of a local cluster to switch control so that the data services of the remote cluster are handled by the local cluster. Then, a system administrator at the remote cluster location can perform maintenance on the remote cluster.

- **An unplanned switchover**

In some cases, when a MetroCluster cluster goes down or the connections between the clusters are down, ONTAP will automatically initiate a switchover procedure so that the cluster that is still running handles the data handling responsibilities of the down cluster.

At other times, when ONTAP cannot determine the status of one of the clusters, the system administrator of the site that is working initiates the switchover procedure to take control of the data handling responsibilities of the other site.

For any type of switchover procedure, the data servicing capability is returned to the cluster by using a *switchback* process.

You perform different switchover and switchback processes for ONTAP 9.7 and 9.8:

- [Use System Manager 9.7 for switchover and switchback](#)
- [Use System Manager 9.8 for switchover and switchback](#)

Use System Manager 9.7 for switchover and switchback

Steps

1. Log in to System Manager 9.7.
2. Click **(Return to classic version)**.
3. Click **Configuration > MetroCluster**.

System Manager verifies whether a negotiated switchover is possible.


4. Perform one of the following substeps when the validation process has completed:

- a. If validation fails, but Site B is up, then an error has occurred. For example, there might be a problem with a subsystem, or NVRAM mirroring might not be synchronized.
 - i. Fix the issue that is causing the error, click **Close**, and then start again at Step 2.
 - ii. Halt the Site B nodes, click **Close**, and then perform the steps in [Performing an unplanned switchover](#).
 - b. If validation fails, and Site B is down, then most likely there is a connection problem. Verify that Site B is really down, then perform the steps in [Performing an unplanned switchover](#).
5. Click **Switchover from Site B to Site A** to initiate the switchover process.
 6. Click **Switch to the new experience**.

Use System Manager 9.8 for switchover and switchback

Perform a planned switchover (ONTAP 9.8)

Steps

1. Log in to System Manager 9.8.
2. Select **Dashboard**. In the **MetroCluster** section, the two clusters are shown with a connection.
3. In the local cluster (shown on the left), click , and select **Take control of remote site**.

After the switchover request is validated, control is transferred from the remote site to the local site, which performs data service requests for both clusters.

The remote cluster reboots, but the storage components are not active, and the cluster does not service data requests. It is now available for planned maintenance.



The remote cluster should not be used for data servicing until you perform a switchback.

Perform an unplanned switchover (ONTAP 9.8)

An unplanned switchover might be initiated automatically by ONTAP. If ONTAP cannot determine if a switchback is needed, the system administrator of the MetroCluster site that is still running initiates the switchover with the following steps:

Steps

1. Log in to System Manager 9.8.
2. Select **Dashboard**.

In the **MetroCluster** section, the connection between the two clusters is shown with an "X" on it, meaning a connection cannot be detected. Either the connections or the cluster is down.

3. In the local cluster (shown on the left), click , and select **Take control of remote site**.

After the switchover request is validated, control is transferred from the remote site to the local site, which performs data service requests for both clusters.

The cluster must be repaired before it is brought online again.



After the remote cluster is brought online again, it should not be used for data servicing until you perform a switchback.

Perform a switchback (ONTAP 9.8)


Before you start

Whether the remote cluster was down due to planned maintenance or due to a disaster, it should now be up and running and waiting for the switchback.


Steps

1. On the local cluster, log in to System Manager 9.8.
2. Select **Dashboard**.

In the **MetroCluster** section, the two clusters are shown.

3. In the local cluster (shown on the left), click , and select **Take back control**.

The data is *healed* first, to ensure data is synchronized and mirrored between both clusters.

4. When the data healing is complete, click , and select **Initiate switchback**.

When the switchback is complete, both clusters are active and servicing data requests. Also, the data is being mirrored and synchronized between the clusters.

Copyright Information

Copyright © 2021 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.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

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.