

MetroCluster failure and recovery scenarios

ONTAP MetroCluster

Ivana Devine April 21, 2021

Table of Contents

MetroCluster failure and recover	v scenarios	 	 	

MetroCluster failure and recovery scenarios

You should be aware of how the MetroCluster configuration responds to different failure events.



For additional information about recovery from node failures, see the section "Choosing the correct recovery procedure" in the MetroCluster Management and Disaster Recovery Guide.

Event	Impact	Recovery	
Single node failure	A failover is triggered.	The configuration recovers through a local takeover. RAID is not impacted. Review system messages and replace failed FRUs as necessary. AFF and FAS Documentation Center	
Two nodes fail at one site	Two nodes will fail only if automated switchover is enabled in the MetroCluster Tiebreaker software.	Manual USO if automated switchover in MetroCluster Tiebreaker software is not enabled. AFF and FAS Documentation Center	
MetroCluster IP interface—failure of one port	The system is degraded. Additional port failure impacts HA mirroring.	The second port is used. Health Monitor generates an alert if the physical link to the port is broken. Review system messages and replace failed FRUs as necessary. AFF and FAS Documentation Center	
MetroCluster IP interface—failure of both ports	HA capability is impacted. RAID SyncMirror of the node stops syncing.	Immediate manual recovery is required as there is no HA takeover. Review system messages and replace failed FRUs as necessary. AFF and FAS Documentation Center	
Failure of one MetroCluster IP switch	No impact. Redundancy is provided through the second network.	Replace the failed switch as necessary. Replacing an IP switch	

Event	Impact	Recovery
Failure of two MetroCluster IP switches that are in the same network	No impact. Redundancy is provided through the second network.	Replace the failed switch as necessary. Replacing an IP switch
Failure of two MetroCluster IP switches that are at one site	RAID SyncMirror of the node stops syncing. HA capability is impacted and the cluster goes out of quorum.	Replace the failed switch as necessary. Replacing an IP switch
Failure of two MetroCluster IP switches that are at different sites and not on the same network (diagonal failure)	RAID SyncMirror of the node stops syncing.	RAID SyncMirror of the node stops syncing. Cluster and HA capability are not impacted. Replace the failed switch as necessary. Replacing an IP switch

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.