

Requirements for a MetroCluster configuration with array LUNs

ONTAP MetroCluster

netapp-ivanad, ntap-bmegan April 12, 2021

This PDF was generated from https://docs.netapp.com/us-en/ontap-metrocluster/install-fc/reference_requirements_for_a_mcc_configuration_with_array_luns_reference.html on May 31, 2021. Always check docs.netapp.com for the latest.

Table of Contents

Requirements for a MetroCluster configuration with array LUNs	1
Requirements for ONTAP systems	1
Requirements for storage arrays	1
Requirements for FC switches	2
SyncMirror requirements	2

Requirements for a MetroCluster configuration with array LUNs

The ONTAP systems, storage arrays, and FC switches used in MetroCluster configurations must meet the requirements for such types of configurations. In addition, you must also consider the SyncMirror requirements for MetroCluster configurations with array LUNs.

Requirements for ONTAP systems

• The ONTAP systems must be identified as supported for MetroCluster configurations.

NetApp Interoperability Matrix Tool

In the IMT, you can use the Storage Solution field to select your MetroCluster solution. You use the **Component Explorer** to select the components and ONTAP version to refine your search. You can click **Show Results** to display the list of supported configurations that match the criteria.



You must refer to the alert details associated with any configuration that you select in the Interoperability Matrix.

- All the ONTAP systems in a MetroCluster configuration must be of the same model.
- FC-VI adapters must be installed in the appropriate slots for each ONTAP system, depending on the model.

NetApp Hardware Universe

Requirements for storage arrays

• The storage arrays must be identified as supported for MetroCluster configurations.

NetApp Interoperability Matrix Tool

- The storage arrays in the MetroCluster configuration must be symmetric:
 - The two storage arrays must be from the same supported vendor family and have the same firmware version installed.

FlexArray virtualization implementation for NetApp E-Series storage

FlexArray virtualization implementation for third-party storage

- Disk types (for example, SATA, SSD, or SAS) used for mirrored storage must be the same on both storage arrays.
- The parameters for configuring storage arrays, such as RAID type and tiering, must be the same across both sites.

Requirements for FC switches

• The switches and switch firmware must be identified as supported for MetroCluster configurations.

NetApp Interoperability Matrix Tool

- · Each fabric must have two FC switches.
- Each ONTAP system must be connected to storage using redundant components so that there is redundancy in case of device and path failures.
- FAS9000 storage systems support up to eight ISLs per fabric. Other storage system models support up to four ISLs per fabric.

The switches must use the MetroCluster basic switch configuration, ISL settings, and FC-VI configurations.

Configuring the Cisco or Brocade FC switches manually

SyncMirror requirements

- SyncMirror is required for a MetroCluster configuration.
- Two separate storage arrays, one at each site, are required for the mirrored storage.
- · Two sets of array LUNs are required.

One set is required for the aggregate on the local storage array (pool0) and another set is required at the remote storage array for the mirror of the aggregate (the other plex of the aggregate, pool1).

The array LUNs must be of the same size for mirroring the aggregate.

• Unmirrored aggregates are also supported in the MetroCluster configuration.

They are not protected in the event of a site disaster.

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.