



# **Where to find procedures for MetroCluster maintenance tasks**

## **ONTAP MetroCluster**

aherbin, netapp-ivanad, ntap-bmegan  
April 21, 2021

This PDF was generated from [https://docs.netapp.com/us-en/ontap-metrocluster/maintain/concept\\_where\\_to\\_find\\_procedures\\_for\\_mcc\\_maintenance\\_tasks.html](https://docs.netapp.com/us-en/ontap-metrocluster/maintain/concept_where_to_find_procedures_for_mcc_maintenance_tasks.html) on April 28, 2021. Always check docs.netapp.com for the latest.

# Table of Contents

Where to find procedures for MetroCluster maintenance tasks . . . . . 1

# Where to find procedures for MetroCluster maintenance tasks

You should be sure you select the correct procedure when you perform MetroCluster hardware maintenance tasks.



With the release of ONTAP 9.8, the MetroCluster upgrade and expansion procedures have moved to the [MetroCluster Upgrade and Expansion Guide](#) and [MetroCluster Transition Guide](#).

Component	MetroCluster type (FC or IP)	Task	Procedure
ONTAP software	Both	ONTAP software upgrade	<a href="#">Upgrade</a> , <a href="#">revert</a> , or <a href="#">downgrade</a>
Controller module	Both	FRU replacement (including controller modules, PCIe cards, FC-VI card, and so on)	<a href="#">AFF</a> and <a href="#">FAS Documentation Center</a>
		<div><div></div><div>Moving a storage controller module or NVRAM card among the MetroCluster storage systems is not supported.</div></div>	
		Upgrade, expansion, transition,	<a href="#">MetroCluster Upgrade, Transition, and Expansion Guide</a>

Component	MetroCluster type (FC or IP)	Task	Procedure
Drive shelf	FC	Shelf addition (stack with bridges or individual shelf)	<a href="#">Hot-adding a stack of SAS disk shelves to an existing pair of FibreBridge 7500N bridges</a>  <a href="#">Hot-adding a stack of SAS disk shelves and bridges to a MetroCluster system</a>  <a href="#">Hot-adding a SAS disk shelf to a stack of SAS disk shelves</a>
	FC	Shelf removal	<a href="#">Hot-removing storage from a MetroCluster FC configuration</a>
	FC	All other shelf maintenance procedures. The standard procedures can be used.	<a href="#">Service Guide for DS460C DS224C and DS212C Disk Shelves</a>
	IP	All shelf maintenance procedures. The standard procedures can be used.  If adding shelves for an unmirrored aggregate, see <a href="#">Considerations when using unmirrored aggregates</a>	<a href="#">Service Guide for DS460C DS224C and DS212C Disk Shelves</a>
	Both	Hot adding IOM12 shelves to a stack of IOM6 shelves	<a href="#">Hot-adding shelves with IOM12 modules to a stack of shelves with IOM6 modules</a>

Component	MetroCluster type (FC or IP)	Task	Procedure
FC-to-SAS bridge	FC	Bridge replacement	<p>Replacing a single FC-to-SAS bridge</p> <p>Replacing a pair of FibreBridge 6500N bridges with 7600N or 7500N bridges</p> <p>Hot-swapping a FibreBridge 7500N with a 7600N bridge</p>
	FC	Firmware upgrade	Updating the firmware on a FibreBridge bridge
	FC	Replacing a failed power supply module	Hot-replacing a failed power supply module
FC switch	FC	Switch upgrade	Upgrading to new Brocade FC switches
	FC	Switch replacement	<p>Replacing a Brocade FC switch (MetroCluster)</p> <p>Replacing a Cisco FC switch</p>
	FC	Firmware upgrade	<p>Updating firmware on a Brocade FC switch</p> <p>Updating firmware on a Cisco FC switch</p>
SAS optical cables	FC	Cable replacement	
Cluster interconnect switches	FC	Switch replacement	
	Both	Firmware upgrade	

## 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.