Cabling the FC-VI and HBA ports in a four-node fabric-attached MetroCluster configuration with array LUNs

ONTAP MetroCluster

Thom Illingworth, Ivana Devine
August 12, 2021

This PDF was generated from https://docs.netapp.com/us-en/ontap-metrocluster/install-fc/task_cable_the_fc_vi_and_hba_ports_to_switches_in_a_four_node_fabric_attached_mcc_configuration_with_array_luns.html on September 24, 2021. Always check docs.netapp.com for the latest.

Table of Contents

Cabling the FC-VI and HBA ports in a four-node fabric-attached MetroCluster configuration with array LUNs 1

Cabling the FC-VI and HBA ports in a four-node fabric-attached MetroCluster configuration with array LUNs

If you are setting up a four-node fabric-attached MetroCluster configuration with array LUNs, you must cable the FC-VI ports and the HBA ports to the switch ports.

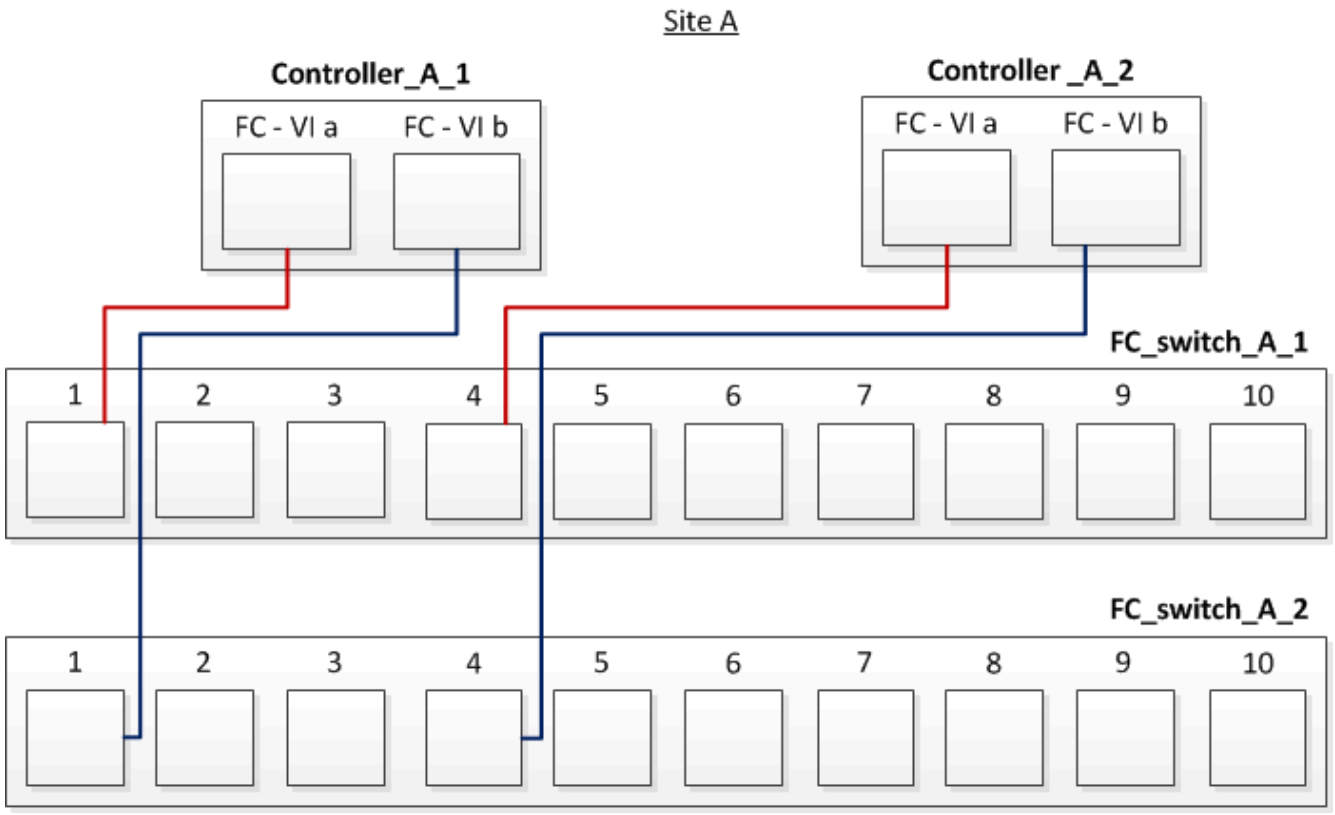
About this task

- You must repeat this task for each controller at both of the MetroCluster sites.
- If you plan to use disks in addition to array LUNs in your MetroCluster configuration, you must use the HBA ports and switch ports specified for configuration with disks.
  - Port assignments for FC switches when using ONTAP 9.1 and later
  - Port assignments for FC switches when using ONTAP 9.0

Steps

1. Cable the FC-VI ports from each controller to the ports on alternate FC switches.

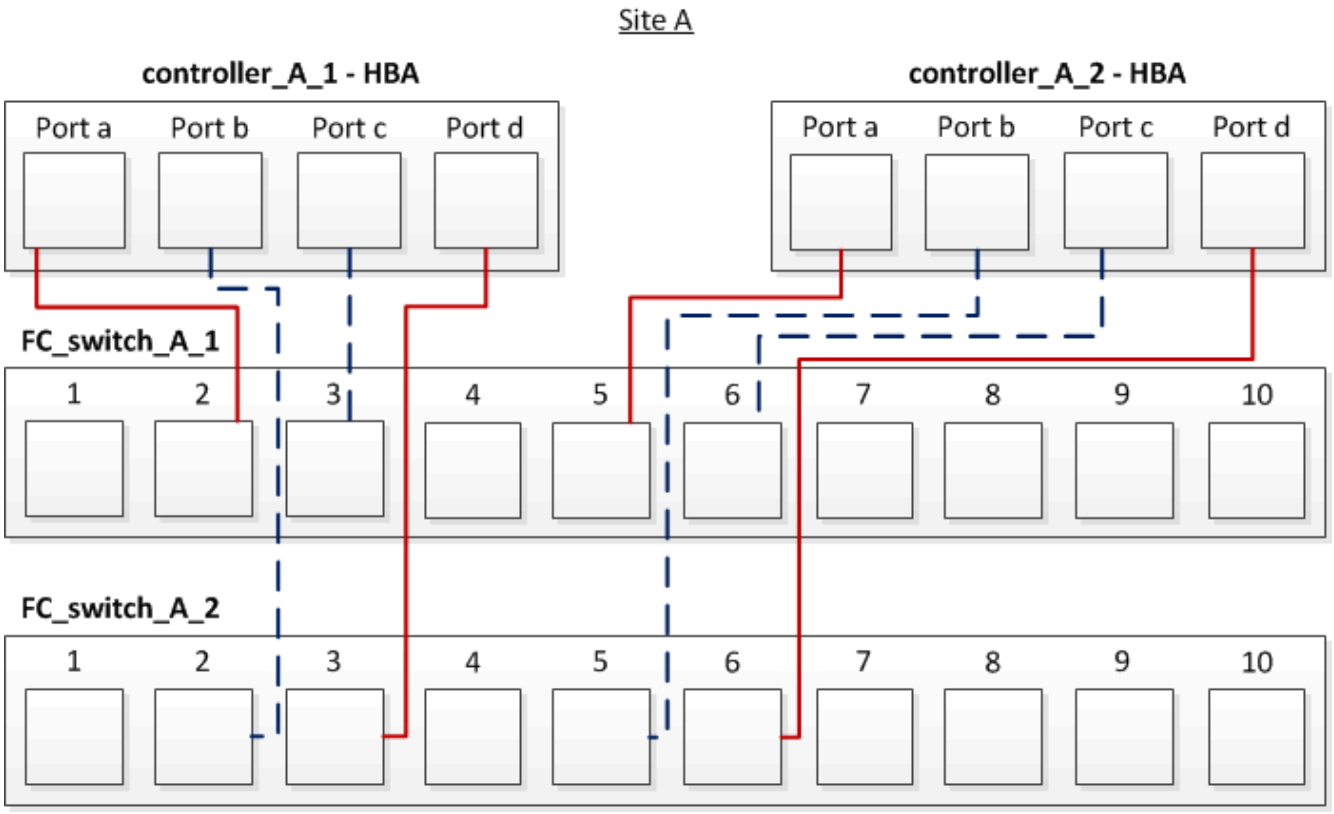
   The following example shows the connections between the FC-VI ports and switch ports at Site A:



2. Perform the controller-to-switch cabling at both of the MetroCluster sites.

   You must ensure redundancy in connections from the controller to the switches. Therefore, for each controller at a site, you must ensure that both of the HBA ports in the same port pair are connected to alternate FC switches.

The following example shows the connections between the HBA ports and switch ports at Site A:



The following table lists the connections between the HBA ports on controller_A_1 and the FC switch ports in the illustration:

HBA ports	Switch ports
Port pair	
Port a	FC_switch_A_1, Port 2
Port d	FC_switch_A_2, Port 3
Port pair	
Port b	FC_switch_A_2, Port 2
Port c	FC_switch_A_1, Port 3

The following table lists the connections between the HBA ports on controller_A_2 and the FC switch ports in the illustration:

HBA ports	Switch ports
Port pair	
Port a	FC_switch_A_1, Port 5

Port d	FC_switch_A_2, Port 6
Port pair	
Port b	FC_switch_A_2, Port 5
Port c	FC_switch_A_1, Port 6

After you finish

You should cable the ISLs between the FC switches across the MetroCluster sites.

Related information

When you are connecting ONTAP systems to FC switches for setting up a MetroCluster configuration with array LUNs, you must connect FC-VI and HBA ports from each controller to specific switch ports.

Switch ports required for a MetroCluster configuration with array LUNs

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.