



Optional - Move internal storage or convert to drive shelf

AFF and FAS Controller Upgrade

NetApp
April 26, 2022

Table of Contents

- Optional - Move internal storage or convert to drive shelf 1
 - Optional: Move internal storage or convert the system to a drive shelf 1
 - Move internal drives from an original node 1
 - Convert an original node to a drive shelf 2

Optional - Move internal storage or convert to drive shelf

Optional: Move internal storage or convert the system to a drive shelf

If your original node is one of the supported models, you can move its internal SATA drives or SSDs to a drive shelf that is attached to the new nodes during the process of upgrading by moving storage. You can also convert the system to a drive shelf and attach it to the new nodes.

About this task

You can move drives or drive shelves only within the same cluster.

Choices

- [Move internal drives from an original node](#)

If your original node is one of the supported models, during the process of upgrading by moving storage you can move the node's internal SATA drives or SSDs to a drive shelf that is attached to the new node in the same cluster. You cannot transfer SAS drives to a drive shelf attached to the new nodes.

- [Convert an original node to a drive shelf](#)

If your original node is one of the supported models, during the process of upgrading by moving storage you can convert the node to a drive shelf and then attach it to the new nodes in the same cluster..

Move internal drives from an original node

If your original node is one of the supported models, during the process of upgrading by moving storage you can move the node's internal SATA drives or SSDs to a drive shelf that is attached to the new node in the same cluster. You cannot transfer SAS drives to a drive shelf attached to the new nodes.

Before you begin

- You must have reviewed [Considerations for upgrading controller hardware](#) about moving internal drives.

Contact technical support if you need guidance specific to your configuration.

- The SATA or SSD drive carriers from the original node must be compatible with the new drive shelf.
- A compatible drive shelf must already be attached to the new node.
- The drive shelf must have enough free bays to accommodate the SATA or SSD drive carriers from the original node.

Steps

1. Gently remove the bezel from the front of the system.
2. Press the release button on the left side of the drive carrier.

The cam handle on the carrier partially springs open, and the carrier releases from the midplane.

3. Pull the cam handle to its fully open position to unseat the carrier from the midplane, and then gently slide the carrier out of the drive shelf.



Always use two hands when removing, installing, or carrying a drive. However, do not place your hands on the drive boards exposed on the underside of the carrier.

4. With the cam handle in the open position, insert the carrier into a slot in the new drive shelf, firmly pushing until the carrier stops.



Use two hands when inserting the carrier.

5. Close the cam handle so that the carrier is fully seated in the midplane and the handle clicks into place.

You must close the handle slowly so that it aligns correctly with the face of the carrier.

6. Repeat [Step 2](#) through [Step 5](#) for all of the drives that you are moving to the new system.

Convert an original node to a drive shelf

If your original node is one of the supported models, during the process of upgrading by moving storage you can convert the node to a drive shelf and then attach it to the new nodes in the same cluster.

Before you begin

You must have reviewed [Considerations for upgrading controller hardware](#) about converting a node to a drive shelf. Contact technical support if you need guidance specific to your configuration.

Steps

1. Replace the controller modules in the node you are converting with appropriate IOM modules.

[NetApp Hardware Universe](#)

2. Set the drive shelf ID.

Each drive shelf, including the chassis, requires a unique ID.

3. Reset other drive shelf IDs as needed.
4. Turn off power to any drive shelves connected to the new nodes, and then turn off power to the new nodes.
5. Cable the converted drive shelf to a SAS port on the new system, and, if you are using out-of-band ACP cabling, to the ACP port on the new node.
6. Turn on the power to the converted drive shelf and any other drive shelves attached to the new nodes.
7. Turn on the power to the new nodes, and then interrupt the boot process on each node by pressing Ctrl-C to access the boot environment prompt.

Copyright Information

Copyright © 2022 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.