



# **Install the replacement system modules on node2**

## **Upgrade controllers**

NetApp  
February 10, 2026

This PDF was generated from <https://docs.netapp.com/us-en/ontap-systems-upgrade/upgrade-arl-auto-in-chassis/install-aff-a30-a50-c30-c50-node2.html> on February 10, 2026. Always check docs.netapp.com for the latest.

# Table of Contents

- Install the replacement system modules on node2 ..... 1
  - Install AFF A30, AFF A50, AFF C30, or AFF C60 module on node2 ..... 1
  - Install the AFF A90 or AFF A70 module on node2 ..... 2
  - Install the ASA A150, AFF A150, or FAS2820 controller module on node2 ..... 4
  - Install the ASA A900, AFF A900, or FAS9500 NVRAM and controller modules on node2 ..... 5
    - Install the ASA A900, AFF A900, or FAS9500 NVRAM module ..... 5
    - Install the ASA A900, AFF A900, or FAS9500 controller module in node2 ..... 5

# Install the replacement system modules on node2

## Install AFF A30, AFF A50, AFF C30, or AFF C60 module on node2

Install the replacement controller module that you received for the upgrade on node2. Node2 is controller B located in the bottom half of the chassis when looking at the controllers from the rear of the system.

### Steps

1. Position the storage system onto the rails in the middle of the cabinet or telco rack, and then support the storage system from the bottom and slide it into place.



Don't completely insert the controller module in the chassis until instructed to do so later in the procedure.

2. Cable the management and console ports to the node2 controller module.



Because the chassis is already powered ON, node2 starts BIOS initialization followed by AUTOBOOT as soon as it is fully seated. To interrupt the node2 boot, before completely inserting the controller module into the slot, it is recommended that you connect the serial console and management cables to the node2 controller module.

3. With the cam handle in the open position, firmly push the controller module in until it meets the midplane and is fully seated. The locking latch rises when the controller module is fully seated. Close the cam handle to the locked position.



To avoid damaging the connectors, don't use excessive force when sliding the controller module into the chassis.

4. Connect the serial console as soon as the module is seated and be ready to interrupt AUTOBOOT of node2.
5. After you interrupt AUTOBOOT, node2 stops at the LOADER prompt. If you do not interrupt AUTOBOOT on time and node2 starts booting, wait for the prompt and press Ctrl-C to go into the boot menu. After the node stops at the boot menu, use option 8 to reboot the node and interrupt AUTOBOOT during reboot.
6. At the LOADER> prompt of node2, set the default environment variables:

```
set-defaults
```

7. Save the default environment variables settings:

```
saveenv
```

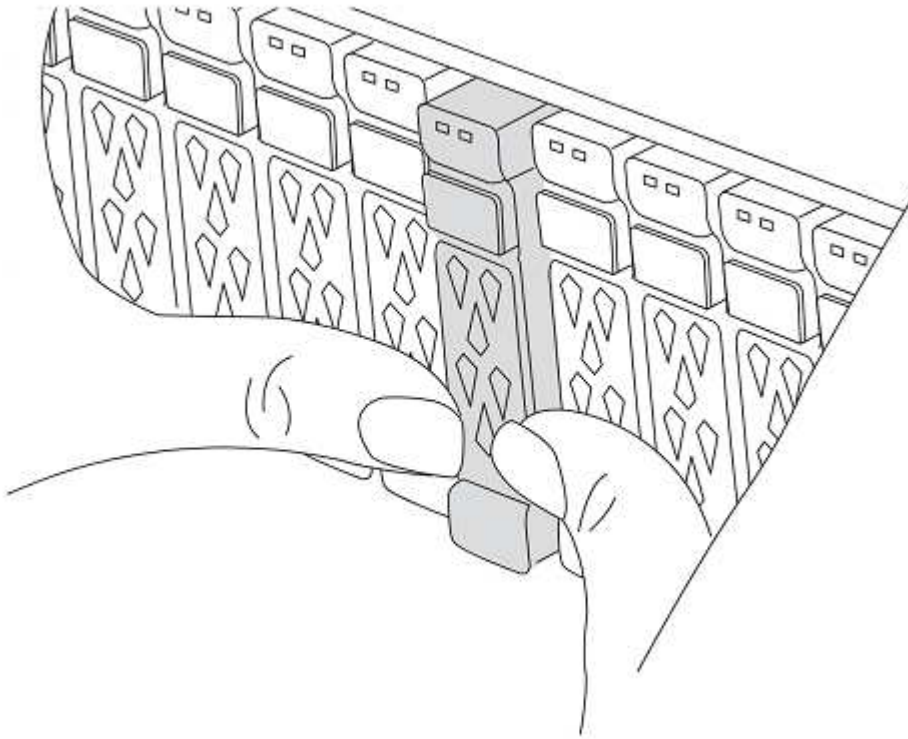
8. For two-node switchless configurations, verify that you have an X60132A, 4-port 10/25 GbE card in slot1 on node2. The X60132A card is required for cluster interconnect during the upgrade.

## Install the AFF A90 or AFF A70 module on node2

Install the AFF A90 or AFF A70 controller module that you received for the upgrade on node2. Node2 is controller B located on the lower bay of the chassis when looking at the controllers from the rear of the system.

### Steps

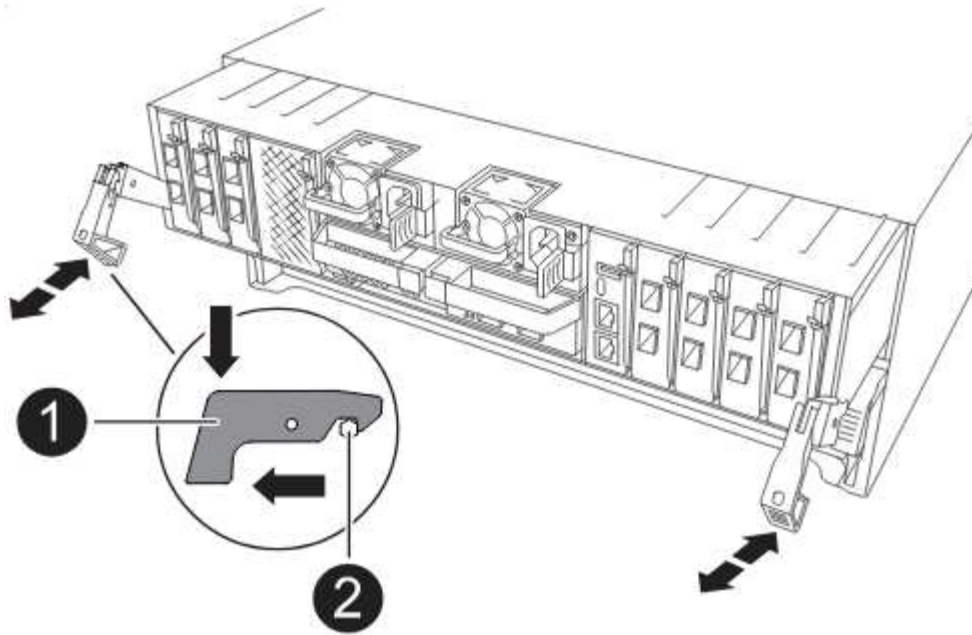
1. On the front of the chassis, use your thumbs to firmly push each drive in to the top and bottom disk bays until you feel a positive stop. This ensures that the drives are firmly seated against the chassis midplane.



- a. Go to the rear of the chassis.
2. Align the end of the controller module with the opening in the chassis, and then gently push the controller module halfway into the system.



Don't completely insert the controller module in the chassis until instructed to do so later in the procedure.



3. Cable the management and console ports to the node2 controller module.



Because the chassis is already powered ON, node2 starts BIOS initialization followed by AUTOBOOT as soon as it is fully seated. To interrupt the node2 boot, before completely inserting the controller module into the slot, it is recommended that you connect the serial console and management cables to the node2 controller module.

4. With the cam handle in the open position, firmly push the controller module in until it meets the midplane and is fully seated. The locking latch rises when the controller module is fully seated. Close the cam handle to the locked position.



To avoid damaging the connectors, don't use excessive force when sliding the controller module into the chassis.

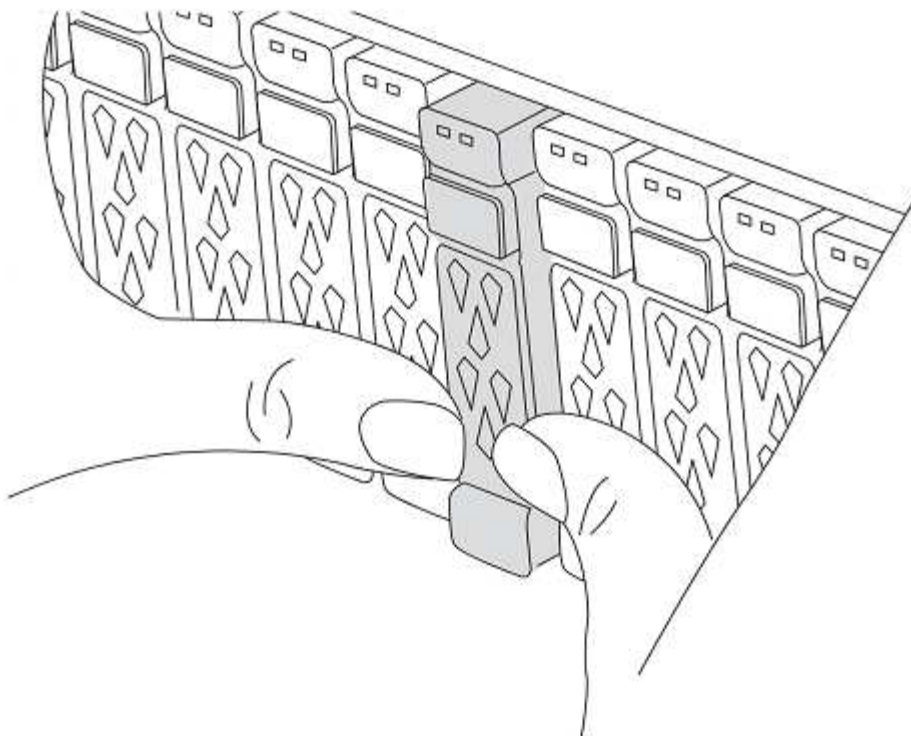
5. Connect the serial console as soon as the module is seated and be ready to interrupt AUTOBOOT of node2.
6. After you interrupt AUTOBOOT, node2 stops at the LOADER prompt. If you do not interrupt AUTOBOOT on time and node2 starts booting, wait for the prompt and press Ctrl-C to go into the boot menu. After the node stops at the boot menu, use option 8 to reboot the node and interrupt AUTOBOOT during reboot.
7. At the LOADER> prompt of node2, set the default environment variables:

```
set-defaults
```

8. Save the default environment variables settings:

```
saveenv
```

9. On the front of the chassis, use your thumbs to firmly push each drive in to the top and bottom disk bays until you feel a positive stop. This ensures that the drives are firmly seated against the chassis midplane.



a. Go to the rear of the chassis.

## Install the ASA A150, AFF A150, or FAS2820 controller module on node2

Install the ASA A150, AFF A150 or FAS2820 controller module that you received for the upgrade on node2. Node2 is controller B located on the right side of the chassis when looking at the controllers from the rear of the system.

### Before you begin

- If you are not already grounded, correctly ground yourself.
- Disconnect all the cables, including console, management, SAS storage, and data network cables, from the controller being removed.

### Steps

1. Align the end of the controller module with bay B in the chassis, and then gently push the controller module halfway into the system.



Bay B is located on the right side of the chassis.



Don't completely insert the controller module in the chassis until you are instructed to do so later in the procedure.

2. Cable the management and console ports to the node2 controller module.



Because the chassis is already powered ON, node2 starts booting as soon as it is fully seated. To prevent node2 from booting, connect the console and management cables before fully inserting the controller module.

3. Firmly push the controller module into the chassis until it meets the midplane and is fully seated.

The locking latch rises when the controller module is fully seated.



To avoid damaging the connectors, don't use excessive force when sliding the controller module into the chassis.

4. Connect the serial console as soon as the module is seated and be ready to interrupt AUTOBOOT of node2.
5. After you interrupt AUTOBOOT, node2 stops at the LOADER prompt. If you do not interrupt AUTOBOOT on time and node2 starts booting, wait for the prompt and press Ctrl-C to go into the boot menu. After the node stops at the boot menu, use option 8 to reboot the node and interrupt AUTOBOOT during reboot.

## Install the ASA A900, AFF A900, or FAS9500 NVRAM and controller modules on node2

Install the ASA A900, AFF A900, or FAS9500 NVRAM and controller modules that you received for the upgrade on node2. Node2 is controller B located on the right side of the chassis when looking at the controllers from the rear of the system.

You must note the following when performing the installation:

- Move all blank filler modules in slots 6-1 and 6-2 from the old NVRAM module to the new NVRAM module.
- Do NOT move the coredump device from the AFF A700 NVRAM module to the ASA A900 or AFF A900 NVRAM module.
- Move all flash cache modules installed in the FAS9000 NVRAM module to the FAS9500 NVRAM module.

### Before you begin

If you are not already grounded, correctly ground yourself.

## Install the ASA A900, AFF A900, or FAS9500 NVRAM module

Install the ASA A900, AFF A900, or FAS9500 NVRAM module in slot 6 of node2.

### Steps

1. Align the NVRAM module with the edges of the chassis opening in slot 6.
2. Gently slide the NVRAM module into the slot until the lettered and numbered I/O cam latch begins to engage with the I/O cam pin, and then push the I/O cam latch all the way up to lock the NVRAM module in place.

## Install the ASA A900, AFF A900, or FAS9500 controller module in node2

Install, cable, and connect the ASA A900, AFF A900, or FAS9500 controller module in node2.

### Steps

1. Align the end of the controller module with bay B in the chassis, and then gently push the controller module halfway into the system.



The bay label is located on the chassis directly above the controller module.



Don't completely insert the controller module in the chassis until you are instructed to do so later in the procedure.

2. Cable the management and console ports to the node2 controller module.



Because the chassis is already powered ON, node2 starts booting as soon as it is fully seated. To avoid node2 booting, it is recommended that you connect the console and management cables to the node2 controller module before completely inserting the controller module into the slot.

3. Firmly push the controller module into the chassis until it meets the midplane and is fully seated.

The locking latch rises when the controller module is fully seated.



To avoid damaging the connectors, don't use excessive force when sliding the controller module into the chassis.

4. Connect the serial console as soon as the module is seated and be ready to interrupt AUTOBOOT of node2.
5. After you interrupt AUTOBOOT, node2 stops at the LOADER prompt. If you do not interrupt AUTOBOOT on time and node2 starts booting, wait for the prompt and press Ctrl-C to go into the boot menu. After the node stops at the boot menu, use option 8 to reboot the node and interrupt AUTOBOOT during reboot.
6. At the LOADER> prompt of node2, set the default environment variables:

```
set-defaults
```

7. Save the default environment variables settings:

```
saveenv
```

## Copyright information

Copyright © 2026 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.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

## 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.