



# **Hot-swap a power supply - shelves with IOM12 modules**

## **ONTAP Systems**

Martin Houser, Lisa LaRocca  
October 14, 2021

# Table of Contents

Hot-swap a power supply - shelves with IOM12 modules ..... 1

# Hot-swap a power supply - shelves with IOM12 modules

You can hot-swap a failed power supply in a DS460C, DS224C, or DS212C disk shelf.

## Before you begin

All other components in the system—including the other power supply—must be functioning properly.

## About this task

- If you are replacing more than one power supply, you must do so one at a time so that the disk shelf maintains power.
- You must replace a power supply within two minutes of removal to minimize disruption to the disk shelf's airflow.
- Always use two hands when removing, installing, or carrying a power supply to support its weight.
- The best practice is to have the current versions of disk shelf (IOM) firmware and disk drive firmware on your system before adding new disk shelves, shelf FRU components, or SAS cables.

Current versions of firmware can be found on the NetApp Support Site.

[NetApp Downloads: Disk Shelf Firmware](#)

[NetApp Downloads: Disk Drive Firmware](#)

- If needed, you can turn on the disk shelf's location (blue) LEDs to aid in physically locating the affected disk shelf: `shelf:storage shelf location-led modify -shelf-name shelf_name -led-status on`

A disk shelf has three location LEDs: one on the operator display panel and one on each IOM12 module. Location LEDs remain illuminated for 30 minutes. You can turn them off by entering the same command, but using the off option.

- If needed, you can refer to the Monitoring disk shelf LEDs section for information about the meaning and location of disk shelf LEDs on the operator display panel and FRU components.

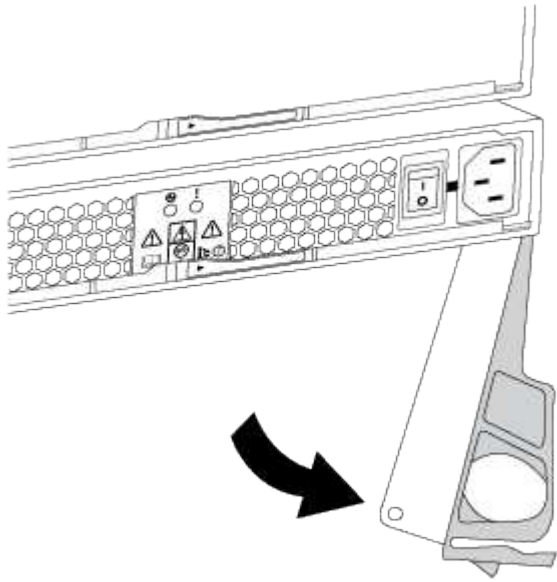
## Steps

1. Properly ground yourself.
2. Unpack the new power supply and set it on a level surface near the shelf.

Save all packing materials for use when returning the failed power supply.

3. Physically identify the failed power supply from the system console warning message and the illuminated attention (amber) LED on the power supply.
4. Turn off the failed power supply and disconnect the power cable:
  - a. Turn off the power switch on the power supply.
  - b. Open the power cord retainer and unplug the power cord from the power supply.
  - c. Unplug the power cord from the power source.
5. Press the orange latch on the power supply cam handle until it releases, and then open the cam handle to fully release the power supply from the mid plane.

The following illustration is for a power supply used in a DS224C or DS212C disk shelf; however, the latch operates the same way for power supplies used in DS460C disk shelves.



6. Use the cam handle to slide the power supply out of the disk shelf.

If you have a DS224C or DS212C disk shelf, as you remove the power supply, a flap swings into place to block the empty bay, helping to maintain air flow and cooling.



When handling a power supply, always use two hands to support its weight.

7. Make sure that the on/off switch of the new power supply is in the Off position.
8. Using two hands, with the cam handle of the new power supply in the open position, support and align the edges of the new power supply with the opening in the disk shelf, and then firmly push the new power supply until it meets the mid plane.



Do not use excessive force when sliding the power supply into the disk shelf; you might damage the connectors.

9. Close the cam handle so that the latch clicks into the locked position and the power supply is fully seated.
10. Reconnect the power supply cable and turn on the new power supply:
  - a. Reconnect the power cord to the power source.
  - b. Reconnect the power cord to the power supply and secure the power cord with the power cord retainer.
  - c. Turn on the power switch.

The power supply's power (green) LED and attention (amber) LED illuminate, and then within 40 seconds, the attention (amber) LED turns off.

11. Return the failed part to NetApp, as described in the RMA instructions shipped with the kit.

Contact technical support at [NetApp Support](#), 888-463-8277 (North America), 00-800-44-638277 (Europe),

or +800-800-80-800 (Asia/Pacific) if you need the RMA number or additional help with the replacement procedure.

## 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.