

AFF A400 Systems Installation and Setup Instructions

Prepare for installation | Stage 1

Pre-setup

1. Unpack all boxes and inventory contents. For more cable information and part numbers, see the [Hardware Universe](#).
2. If you are not already in the AFF and FAS System Documentation Center, go to [AFF and FAS System Documentation Center](#); click AFF A400 systems; click Installation and Setup:
 - Review the [NetApp ONTAP Configuration Guide](#).
 - Watch the videos listed under [Setup videos](#).



Contents In the box

Cables in your shipment are order-dependent. Not all cables shown may be in your shipment.

100 GbE cable (QSFP28)

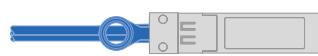
Storage, cluster network, and Ethernet data (order-dependent)



Part numbers:
X66211A-05 (112-00595), 0.5m
X66211A-1 (112-00573), 1m
X66211A-2 (112-00574), 2m
X66211A-5 (112-00576), 5m

25 GbE cable (SFP28s)

HA interconnect, GbE network cable.



Part numbers:
X66240-2 (112-00598), 2m
X66240-5 (112-00639), 5m

RJ-45 cables

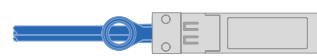
Wrench port (eOM/BMC) (order-dependent)



Part numbers:
X5585-R6 (112-00291), 3m
X6562-R6 (112-00196), 5m

32 Gb FC (SFP+ Op)

FC optical network cable



Part numbers:
X66250-2 (112-00342), 2m
X66250-5 (112-00344), 5m
X66250-15 (112-00346), 15m

Storage Cables

mini-SAS HD to mini-SAS HD cables



Part numbers:
X66030A (112-00435), .5m
X66031A (112-00436), 1m
X66032A (112-00437), 2m
X66033A (112-00438), 3m

16 Gb FC or 25GbE cables

Mezzanine cards (SFPs pre-installed):



Part number:
X66250-2-N-C (112-00342)

Additional cables

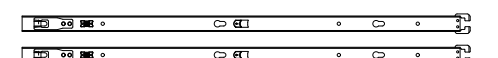


Ethernet cables Power cables

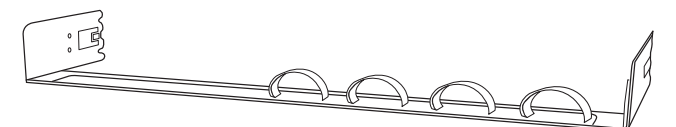


micro USB console cable

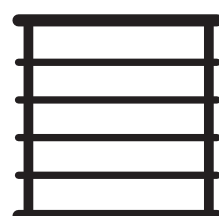
Slide rail kit



Cable management tray

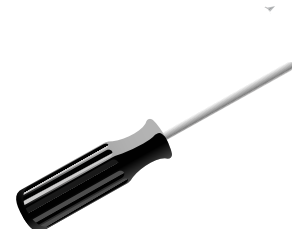


You provide



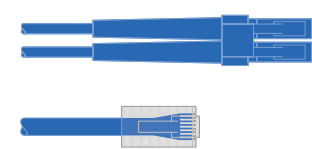
Rack space

4U for AFF A400
+2U for each NS224 shelf
or +4U for each DS460C shelf



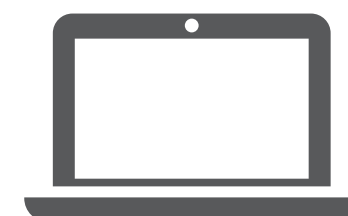
Screwdriver

Phillips #2



Additional network cables

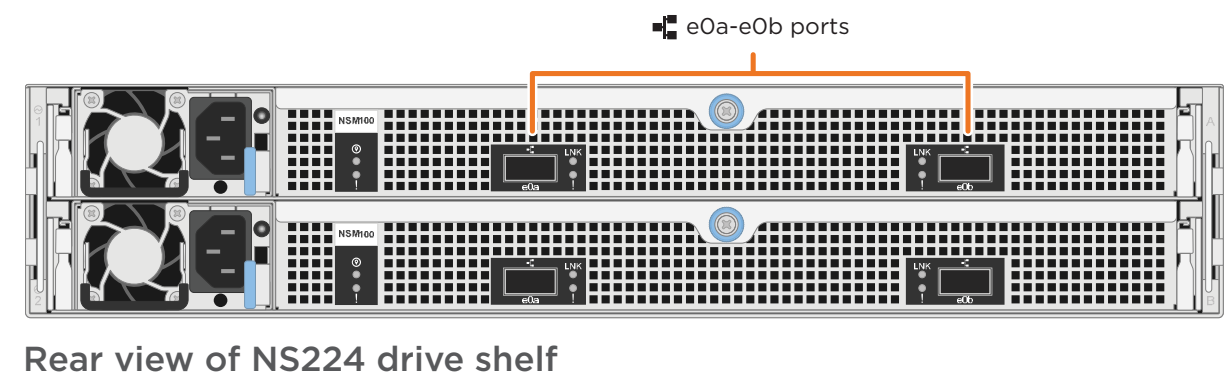
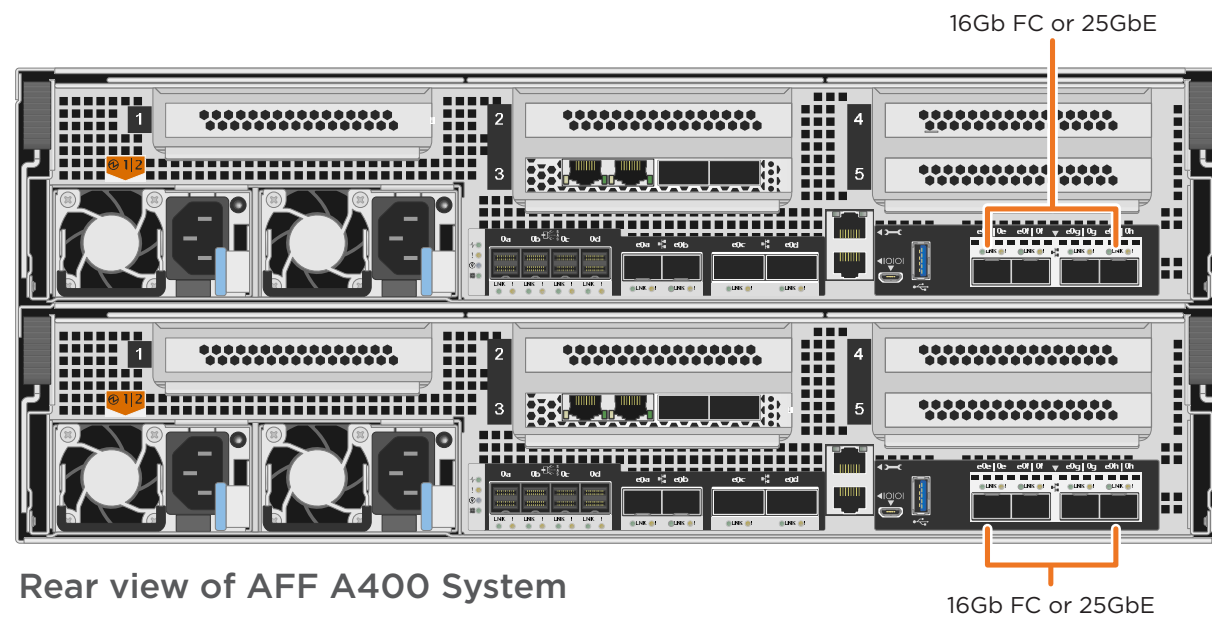
For connecting your storage system to your network switch and laptop or console.



Laptop or console

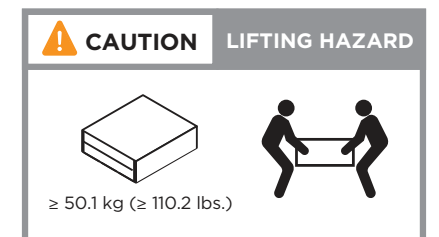
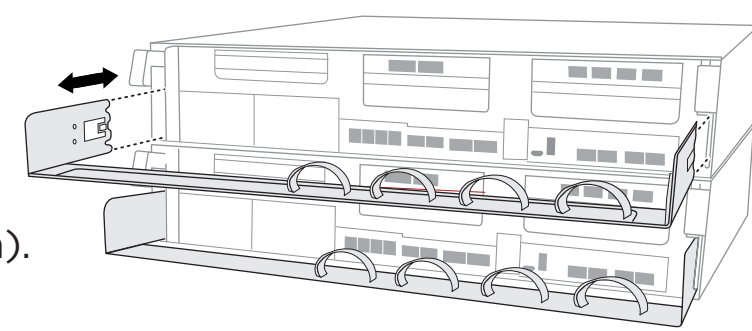
With a USB/serial connection and access to a Web browser to configure your storage system

Install hardware | Stage 2



1 Install system in a rack or cabinet

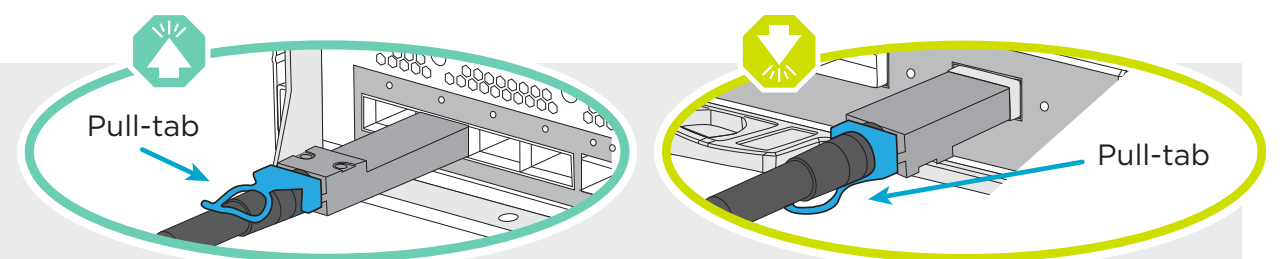
- Install the slide rail or telco tray kits, as needed, and then install and secure your system using the instructions included with the kit.
- Attach cable management devices to the back of each controller (as shown).
- Place the bezel on the front of the system.
- Install any drive shelves for your system.



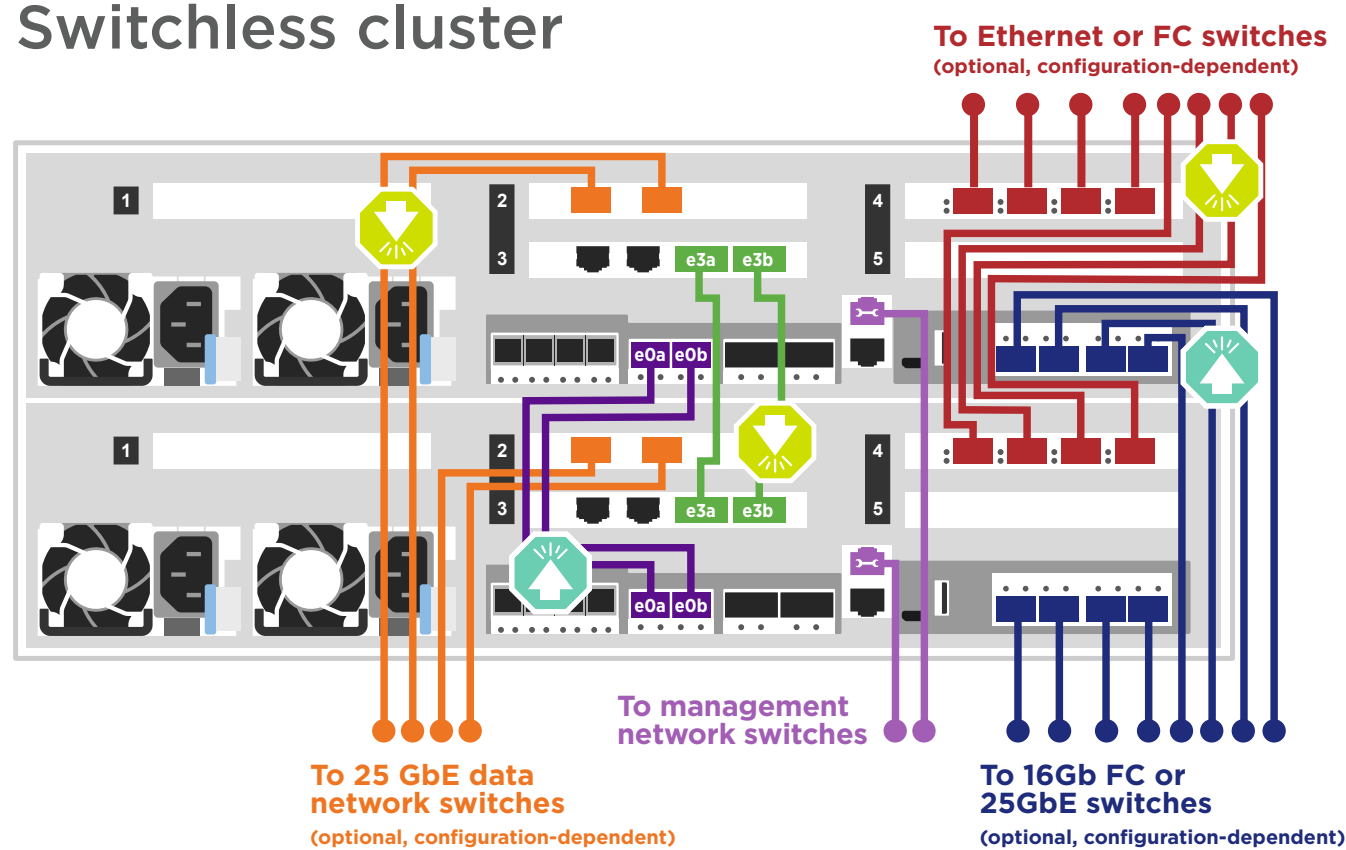
2 Cable the controller for a switchless or switched cluster

See your network administrator for help connecting to your switches.

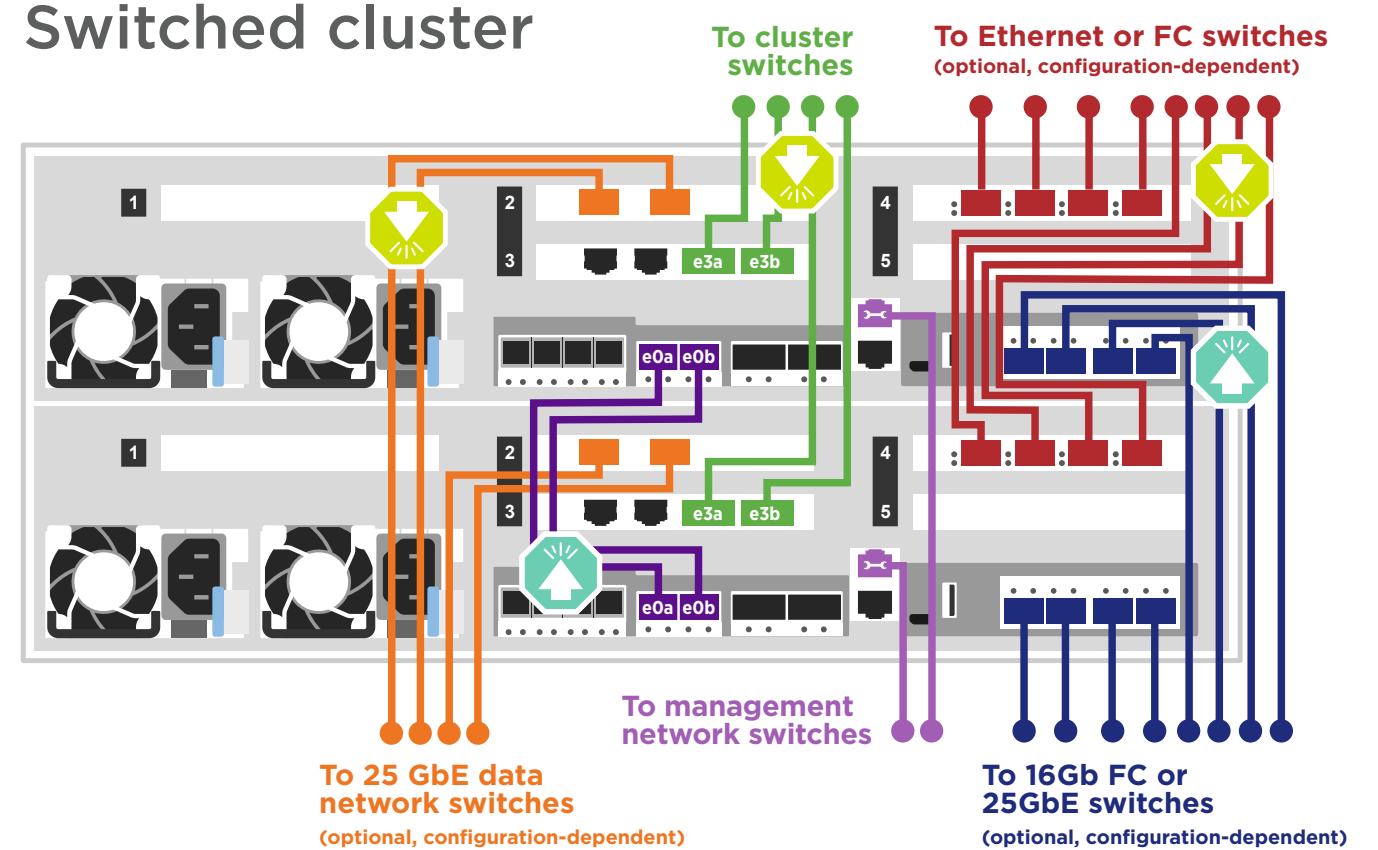
Attention: Be sure to check the illustration arrow for the proper cable connector pull-tab orientation.
 Note: To unplug a cable, gently pull the tab to release the locking mechanism.



Switchless cluster



Switched cluster



- **Switchless cluster:** Connect ports e3a to e3a and ports e3b to e3b

Switched cluster: Controller 1: Connect port e3a to switch 1 and port e3b to switch 2. Controller 2: Connect port e3a to switch 1 and port e3b to switch 2.



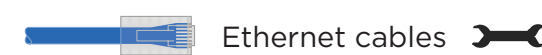
- Connect ports e0a to e0a and ports e0b to e0b



- Connect ports to the 25 GbE data network switches (optional, configuration dependent).



- Connect ports to the FC data network switches (optional, configuration dependent).



- Connect the Wrench port (e0M/BMC) to the management switches



- Connect the mezzanine cards (e0e through e0h) to either 16 Gb FC or 25 GbE switches; configuration dependent.

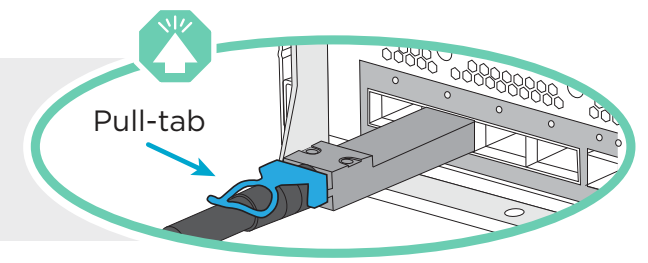
- Strap the cables to the cable management arms. (not shown)

DO NOT plug the power cables into a power source yet.
 The system will boot as soon as the power cables are plugged into the power source and power supplies.



Cable storage | Stage 3

Attention: Be sure to check the illustration arrow for the proper cable connector pull-tab orientation.
 Note: To unplug a cable, gently pull the tab to release the locking mechanism.

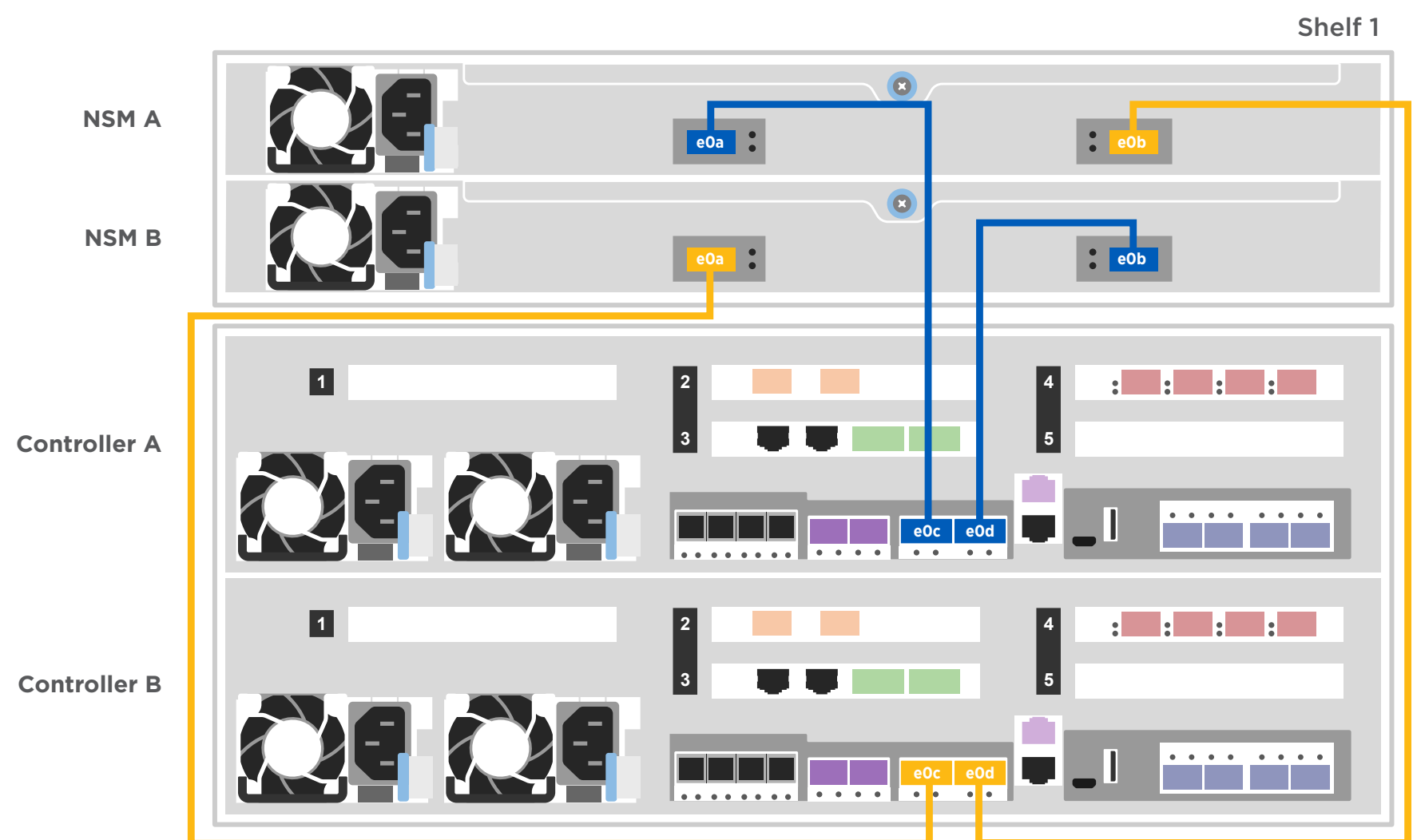


Cabling an AFF A400 system to one NS224 shelf



100 GbE QSFP28 copper cable

- Connect controller A port e0c to port e0a on NSM A on the shelf.
 Connect controller A port e0d to port e0b on NSM B on the shelf.
- Connect controller B port e0c to port e0a on NSM B on the shelf.
 Connect controller B port e0d to port e0b on NSM A on the shelf.

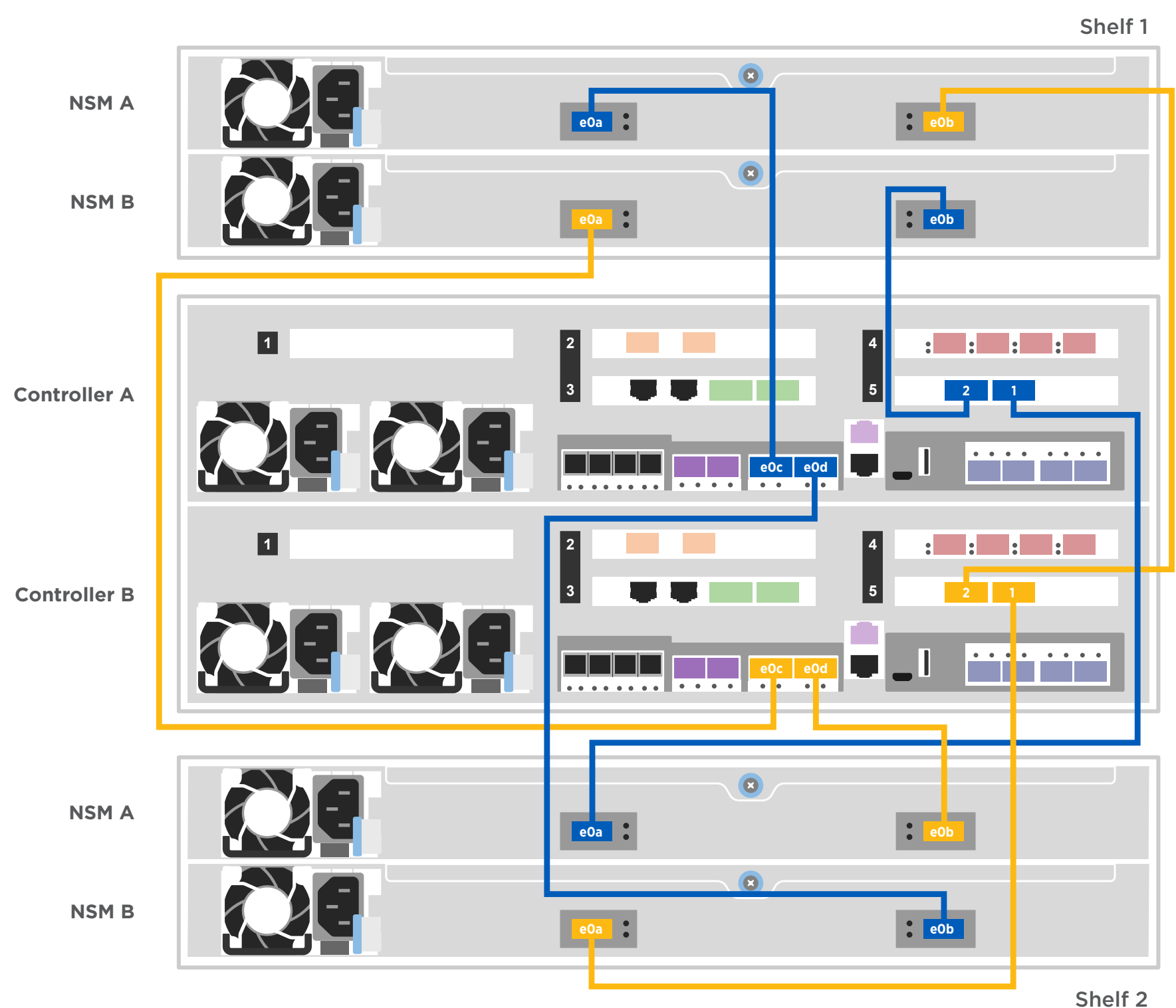
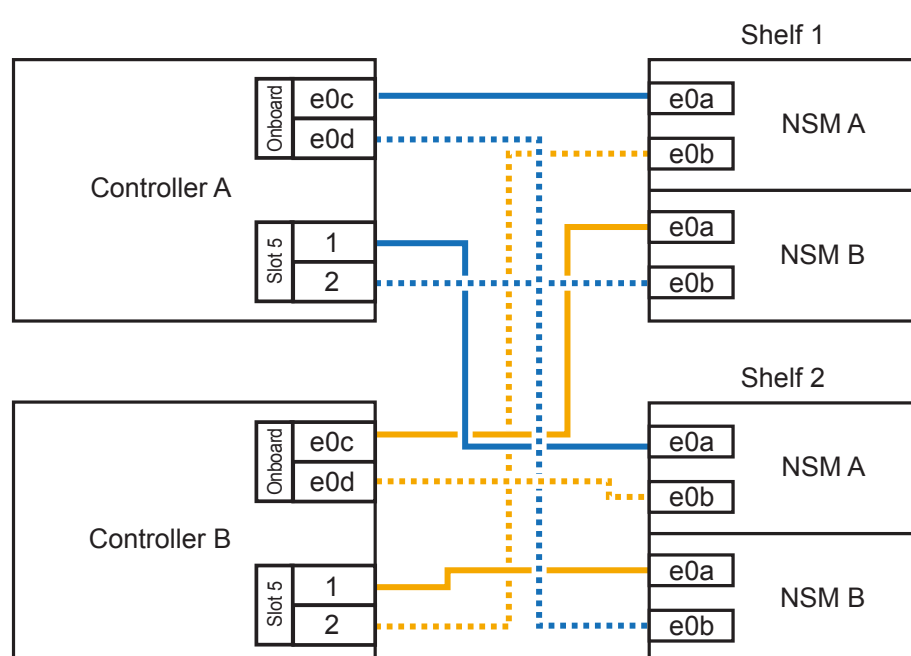


Cabling an AFF A400 system to two NS224 shelves



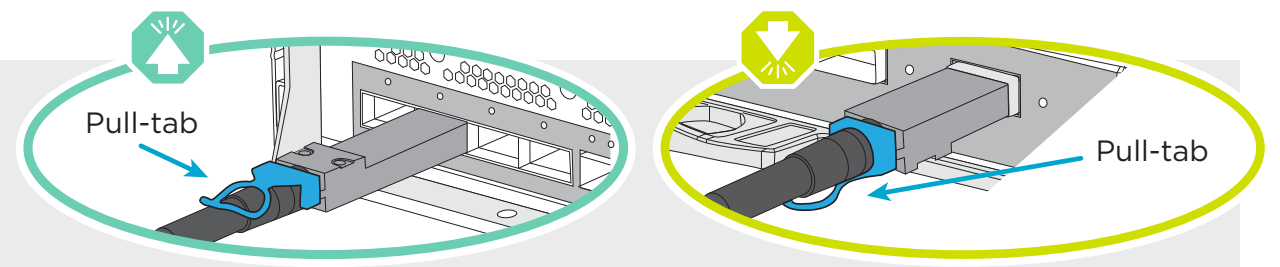
100 GbE QSFP28 copper cable

Use the table below to connect your controllers to the two NS224 shelves.

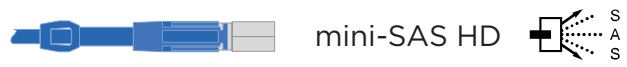


Cable storage | Stage 3 cont.

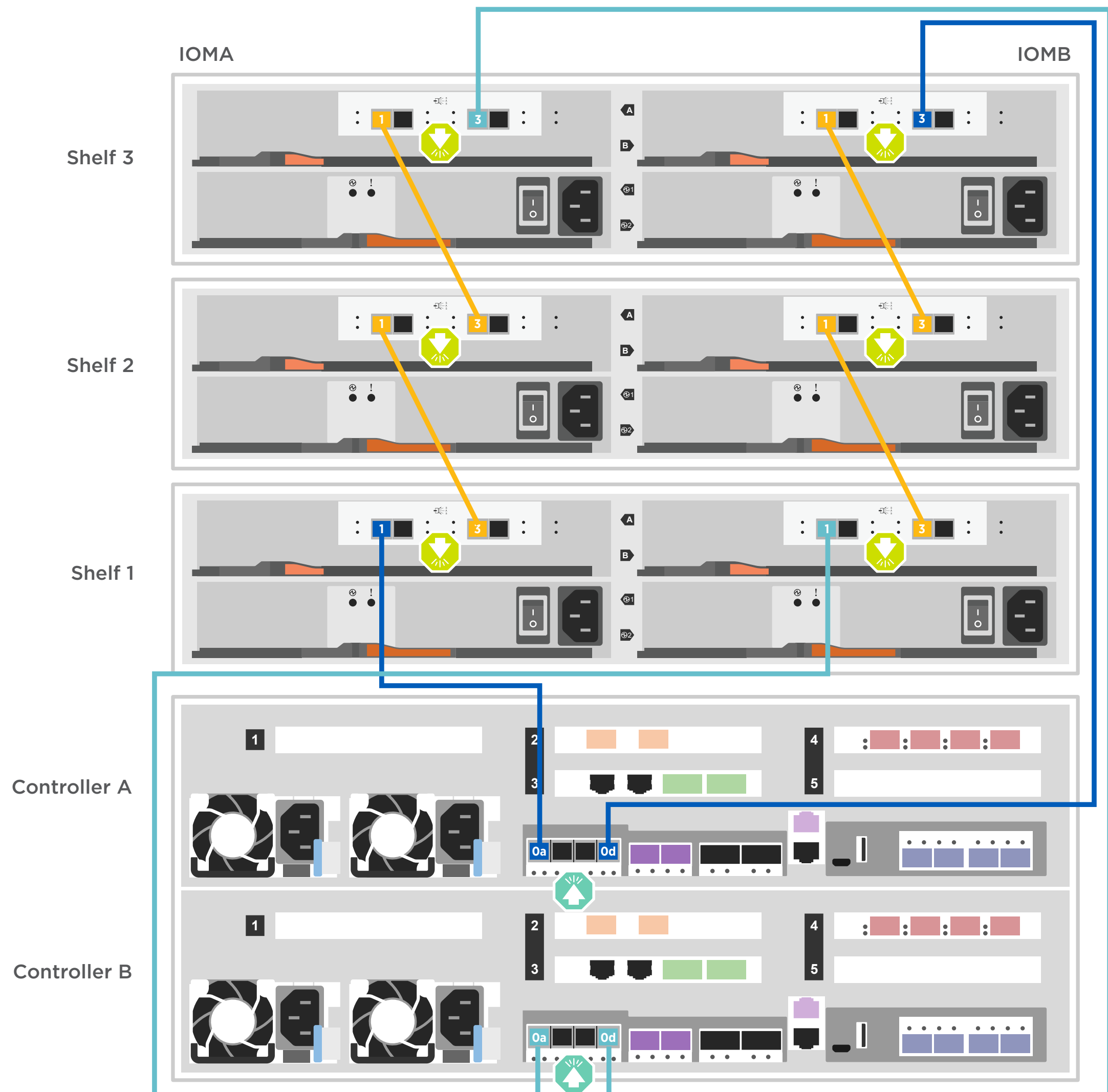
Attention: Be sure to check the illustration arrow for the proper cable connector pull-tab orientation.
Note: To unplug a cable, gently pull the tab to release the locking mechanism.



Cabling an AFF A400 system to three DS224C shelves



- Connect the shelf-to-shelf ports
- Connect Controller A to the drive shelves
- Connect Controller B to the drive shelves



Complete system setup and configuration | Stage 4

1 If your system has one or more external drive shelves, set the shelf IDs:

Note: Shelf IDs are pre-set to 00 and 01 on the NS224 drive shelves. If you want to change the shelf IDs, you must create a tool to access the button.

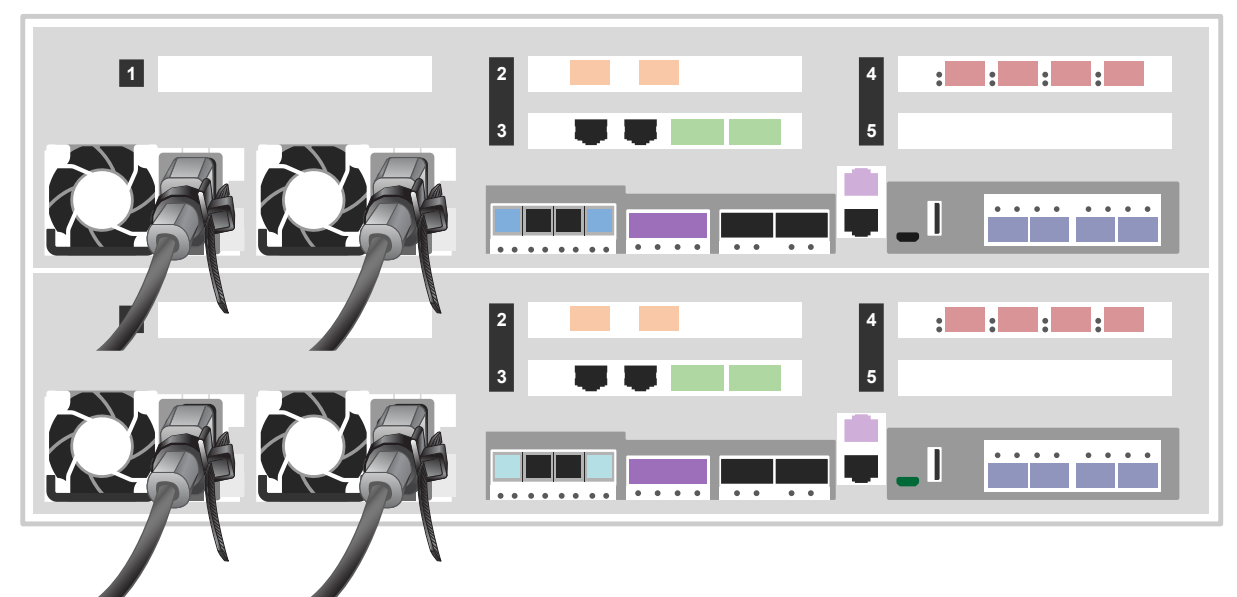
1. Connect the shelves to different power sources, power on the drive shelf, and then remove the end cap on the left of the shelf.
2. Press and hold the shelf ID button until the first digit blinks, and then press the button to advance the first digit (0-9) to the desired number. The first digit continues to blink.
3. Press and hold the button until the second digit blinks, and then press the button to advance the second digit (0-9) to the desired number. The first digit stops blinking, and the second digit continues to blink.
4. Press and hold the button until the second digit stops blinking, and then replace the end cap on the shelf.
5. Wait about 10 seconds for both digits to start blinking again and for the LED to illuminate, and then power-cycle the drive shelf to make the shelf ID take effect.
6. Repeat these steps for any remaining drive shelves.

2 Power on the controllers

Connect and secure the power cables:

- Connect the shelves to different power sources.
- Connect the controllers to different power sources.

Note: The system begins to boot as soon as the power supplies are connected to the power sources. **Booting may take up to 8 minutes.**



3 Complete initial cluster setup:

1. **Make sure that your laptop has network discovery enabled*.**
See your laptop's help for network discovery settings.

2. Connect your laptop to the Management switch.



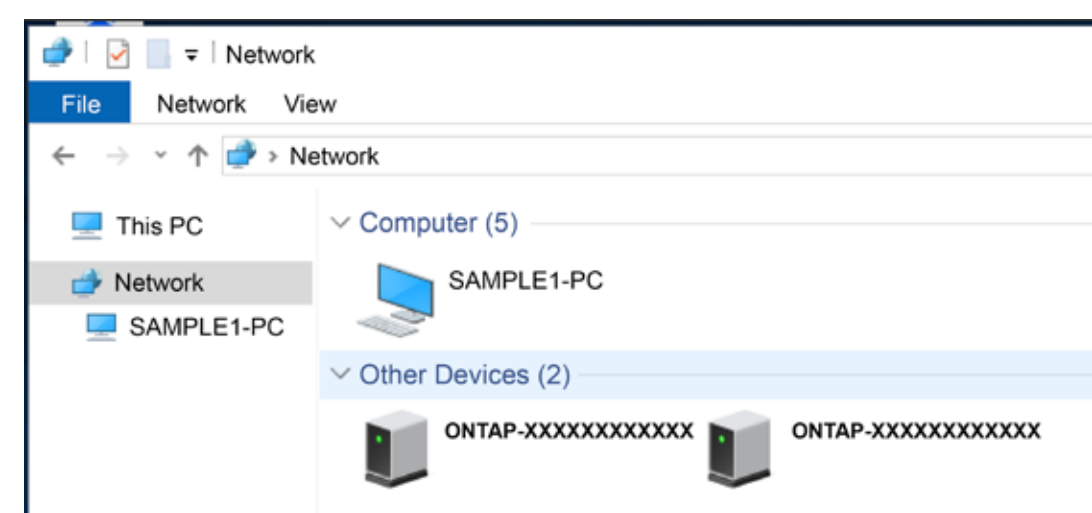
3. Access the network computers and devices:

- Open File Explorer
- Click network in the left pane
- Right click and select refresh.

4. Double-click either ONTAP icon

Note: Accept any certificates displayed on your screen.

*If your laptop does not support network discovery, see the Installation and setup guide for your model for how to complete initial cluster setup.



4 Use System Manager Guided Setup to configure your cluster

5 Completing setup

1. Click...
 - a) mysupport.netapp.com
 - b) [Create/log in to your account](#)
 - c) [Download and install Active IQ Config Advisor \(used at the end\)](#)
 - d) [Register your system](#)
2. Verify the health of your system by running Config Advisor.
3. After you have completed the initial configuration, go to the [NetApp ONTAP Resources](#) page for information about configuring additional features in ONTAP.

