

AFF A900 Systems

Installation and Setup Instructions



Prepare for installation | Stage 1

Pre-setup

- Unpack all boxes and inventory contents.
Attention: Customers with specific power requirements must check [Hardware Universe](#) for their configuration options.
- Watch the [Setup Videos](#).
- Review the [NetApp ONTAP Configuration Guide](#).

Contents
In the box

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

Note: For more cable information and part numbers, see the [Hardware Universe](#).

25 GbE data cable
Network cable

Part numbers:
X66240A-05 (112-00639), 0.5m
X66240A-2 (112-00598), 2m
X66240A-5 (112-00600), 5m

40 GbE network cable
Ethernet data, cluster network

Part numbers:
X66100-1 (112-00542), 1m
X66100-3 (112-00543), 3m
X66100-5 (112-00544), 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

Optical network cable
Ethernet, FC optical connections

Part number
X6553-R6 (112-00188), 2m
X6554-R6 (112-00189), 15m

100 GbE network cable
NVMe storage, Ethernet data, cluster network

Part numbers:
X66211A-05 (112-00595), 0.5m
X66211B-1 (112-00573), 1m
X66211B-2 (112-00574), 2m
X66211B-5 (112-00576), 5m

Additional cables

Ethernet cables

Power cables

Slide rail kit

Cable management arms

You provide

Rack space
8U per chassis

Screwdriver
Phillips #2

Additional network cables

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

Laptop or console

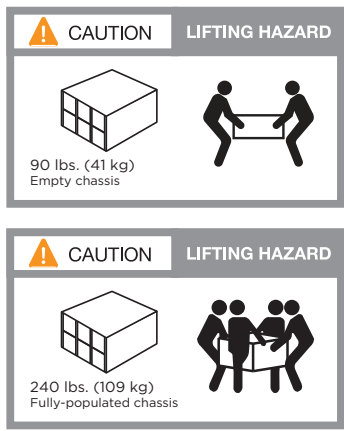
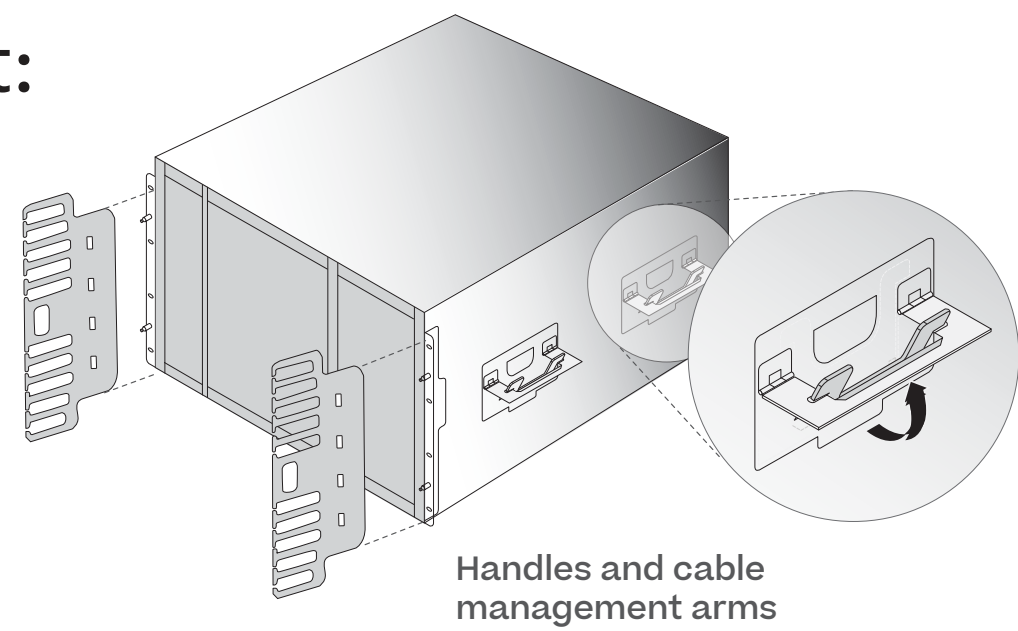
With a USB/serial connection and access to a Web browser to configure your storage system

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Install hardware | Stage 2

1 Install system in a rack or cabinet:

- Install rail kits, as needed, using the rail kit installation instructions.
- Install the empty chassis into the system cabinet or rack.
- Reinstall the system components into the chassis, matching the chassis slot ID with the slot ID sticker on the component.
- Attach cable management arms.
- Place the bezel on the front of the system.



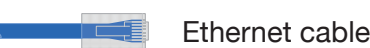
2 Cable controller for a switchless or switched cluster:

See your network administrator for help connecting to your switches.



- 1 Switchless cluster:** Cable cluster interconnect **a** ports together in slot A4 and B4 (e4a) and again in slot A8 and B8 (e8a).

Switched cluster: Cable cluster interconnect **a** ports in slot A4 and B4 (e4a) and again in slot A8 and B8 (e8a) to the cluster network switch.



- 2** Connect the wrench ports to the management switches.



- 3** Cable ports in slot A3 and B3 (e3a and e3c) and slot A9 and B9 (e9a and e9c) to the 25 GbE network switches.



Cable host-side **b** ports in slot A4 and B4 (e4b) and slot A8 and B8 (e8b) to the host switch.



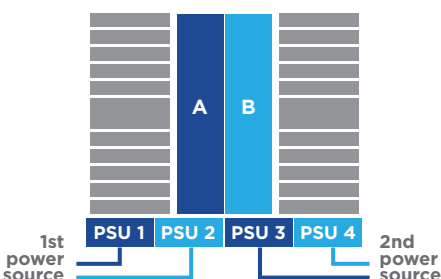
- 4** Cable ports in slot A5 and B5 (5a, 5b, 5c, and 5d) and slot A7 and B7 (7a, 7b, 7c, and 7d) to the 32 Gb FC network switches.

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



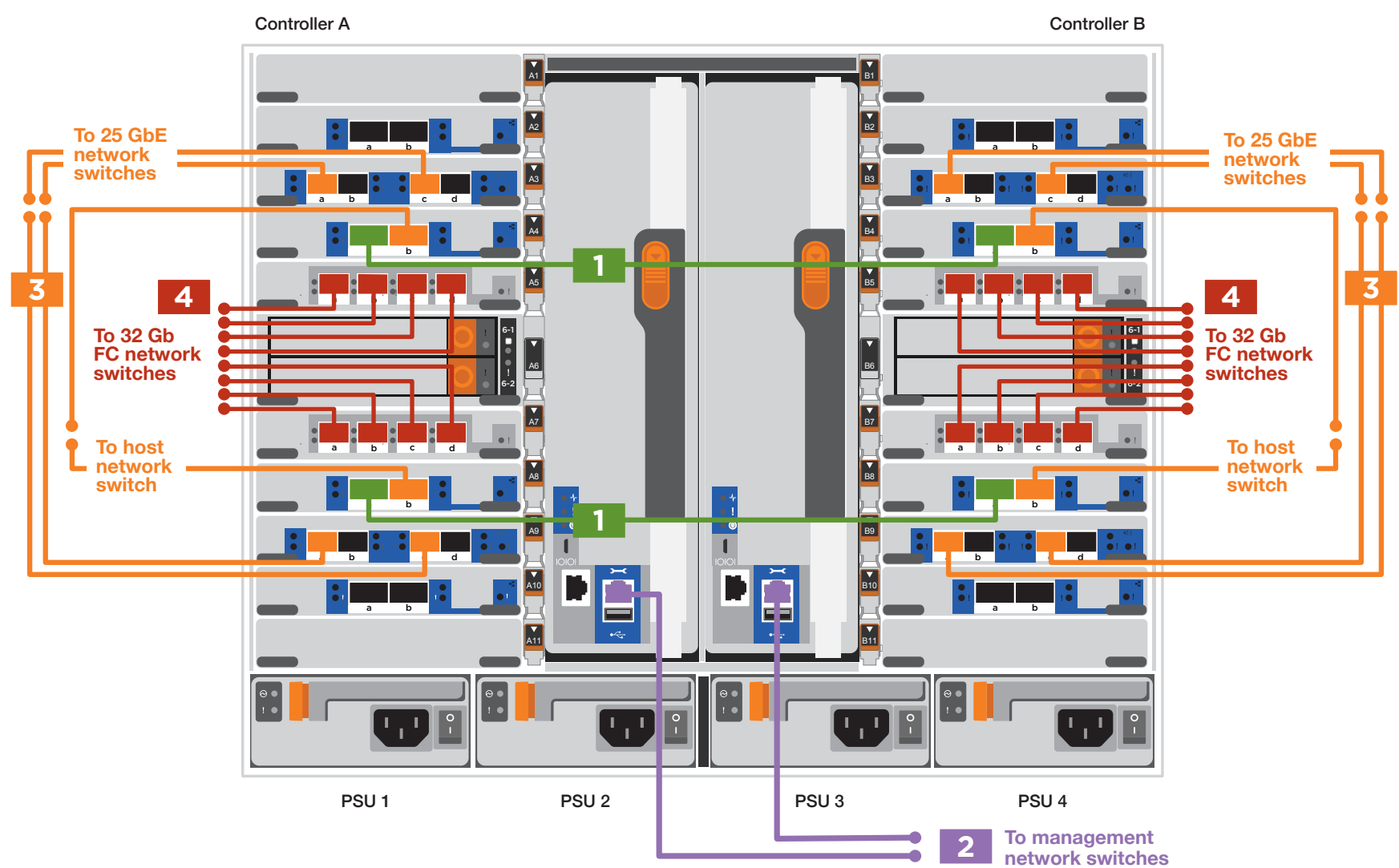
- 6** Connect the power cables to the PSUs and connect them to different power sources (not shown).

PSU 1 and PSU 3 provide power to all side A FRUs, PSU 2 and PSU 4 provide power to all side B FRUs.

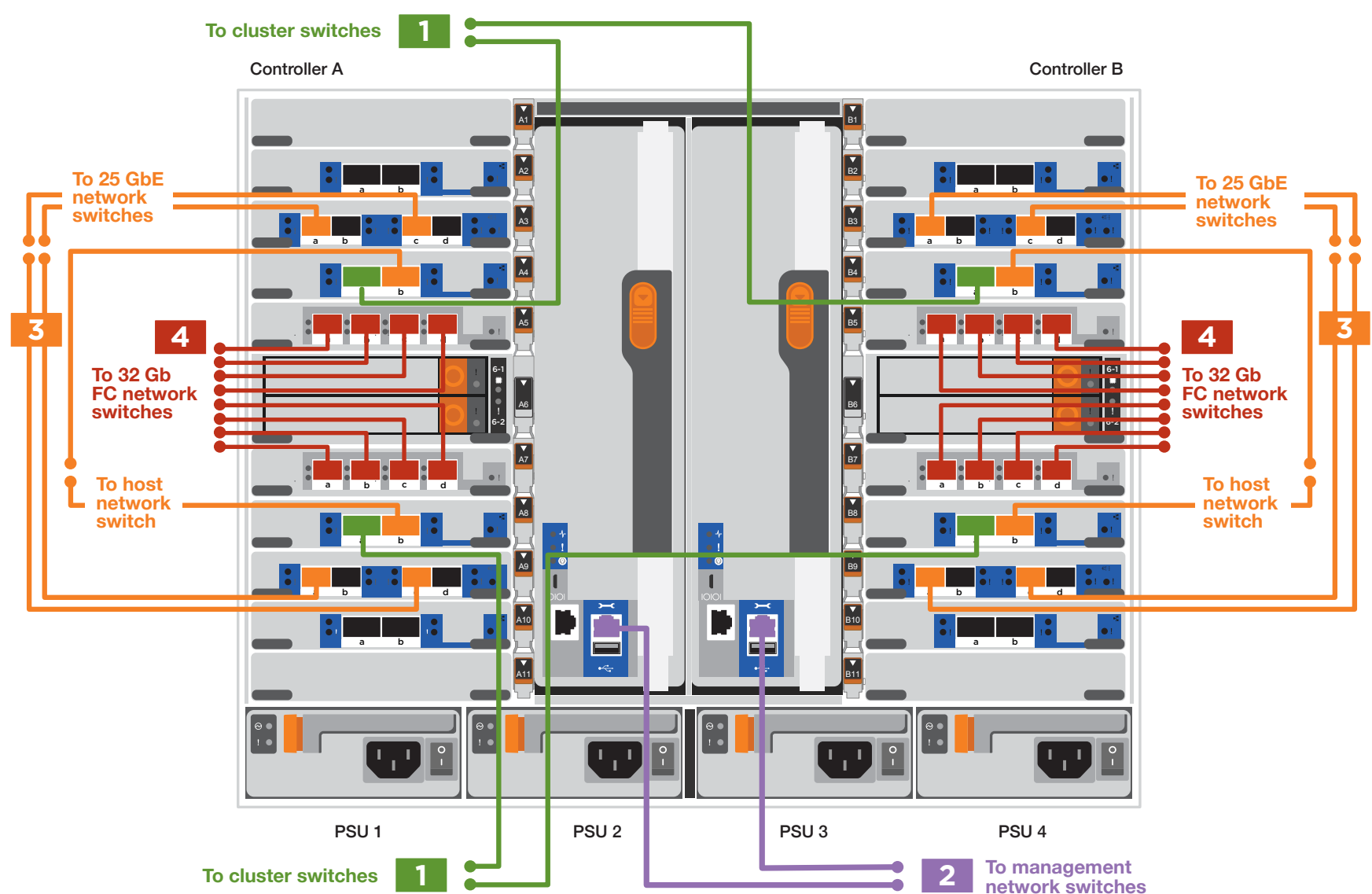


DO NOT power on controllers at this point.

Switchless cluster



Switched cluster



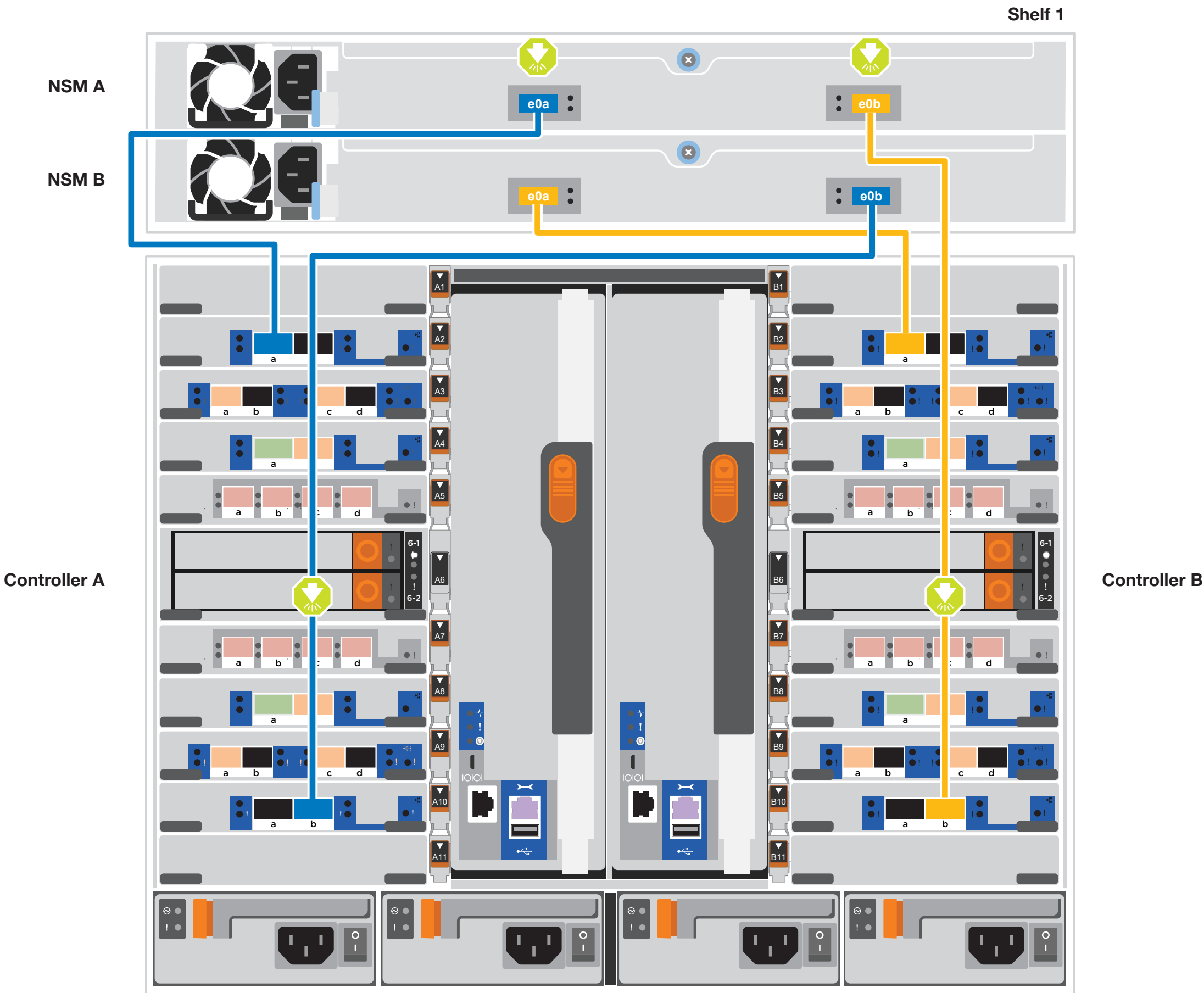
Cable storage | Stage 3

Cabling an AFF A900 with one NS224 disk shelf

 100 GbE QSFP28 copper cable (PN X66211B)

 Insert 100 GbE QSFP28 cable tab **DOWN** and gently push into place until it clicks.

- 1 Connect controller A port e2a to port e0a on NSM A on the shelf.
Connect controller A port e10b to port e0b on NSM B on the shelf.
- 2 Connect controller B port e2a to port e0a on NSM B on the shelf.
Connect controller B port e10b to port e0b on NSM A on the shelf.



Cable storage | Stage 3 cont.

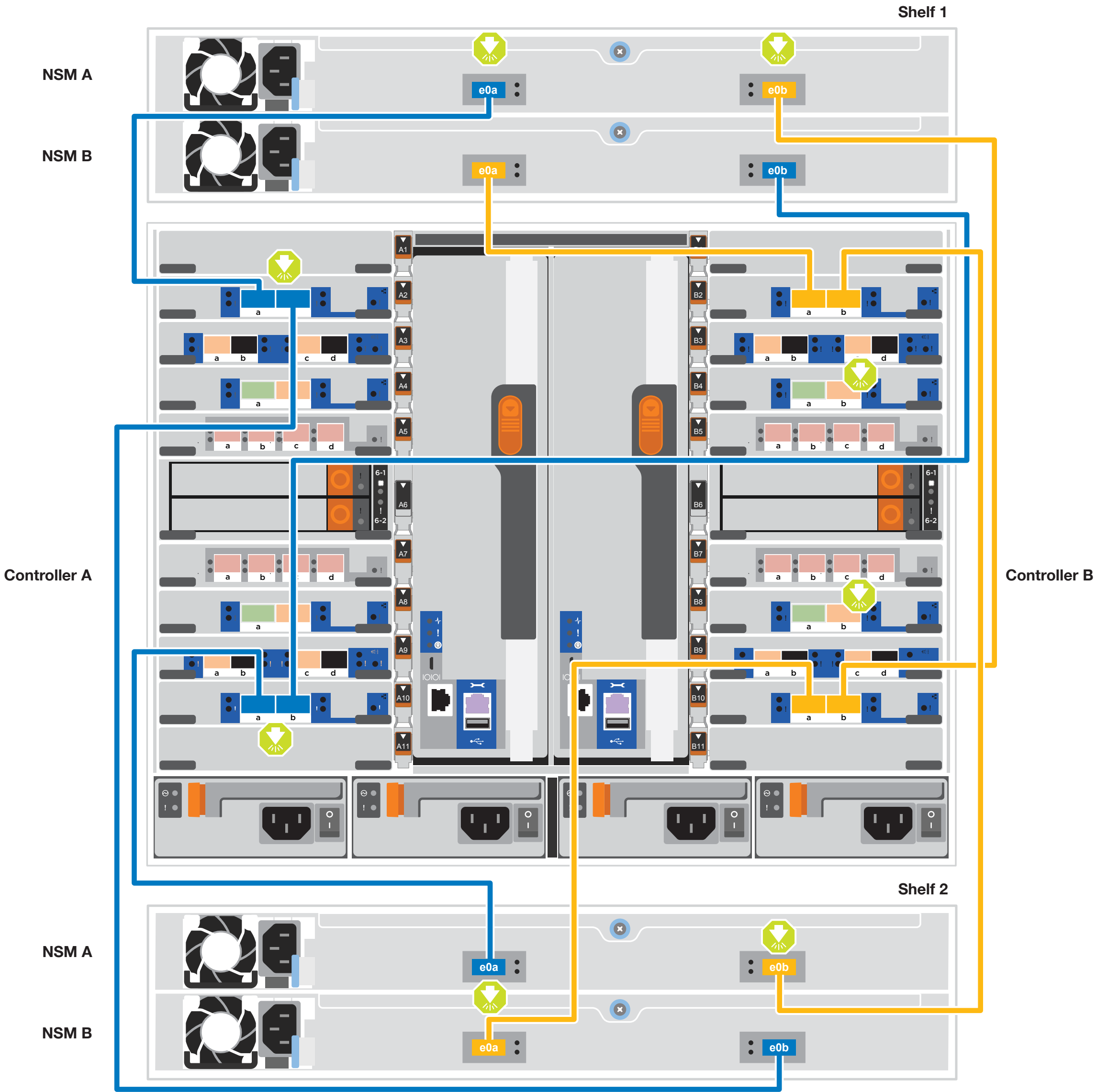
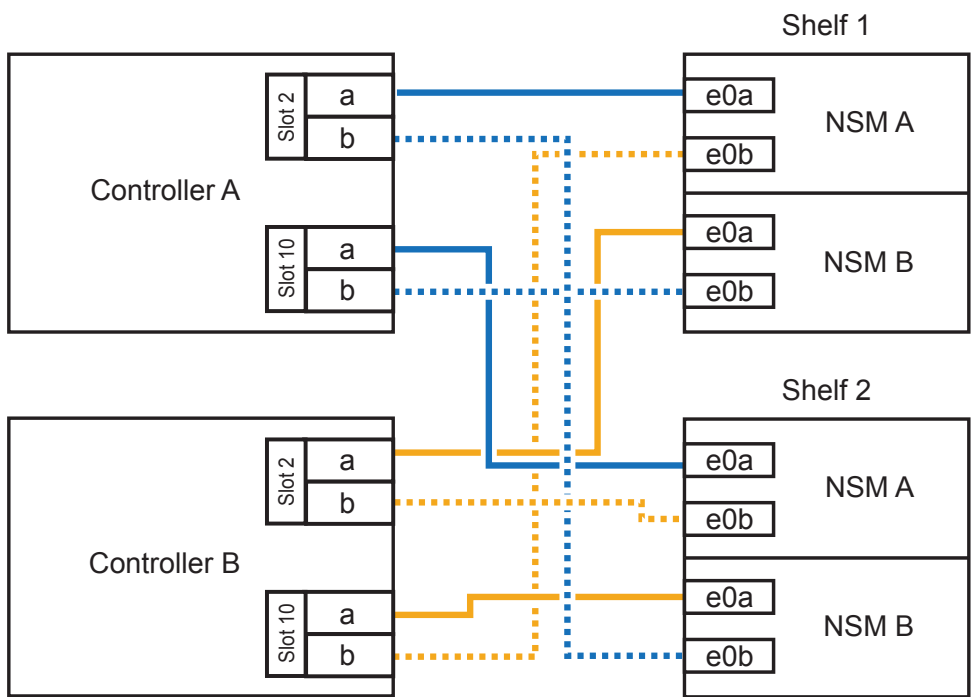
Cabling an AFF A900 with two NS224 disk shelves

 100 GbE QSFP28 copper cable (PN X66211B)



Insert 100 GbE QSFP28 cable tab **DOWN** and gently push into place until it clicks.

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



Complete system setup and configuration | Stage 4

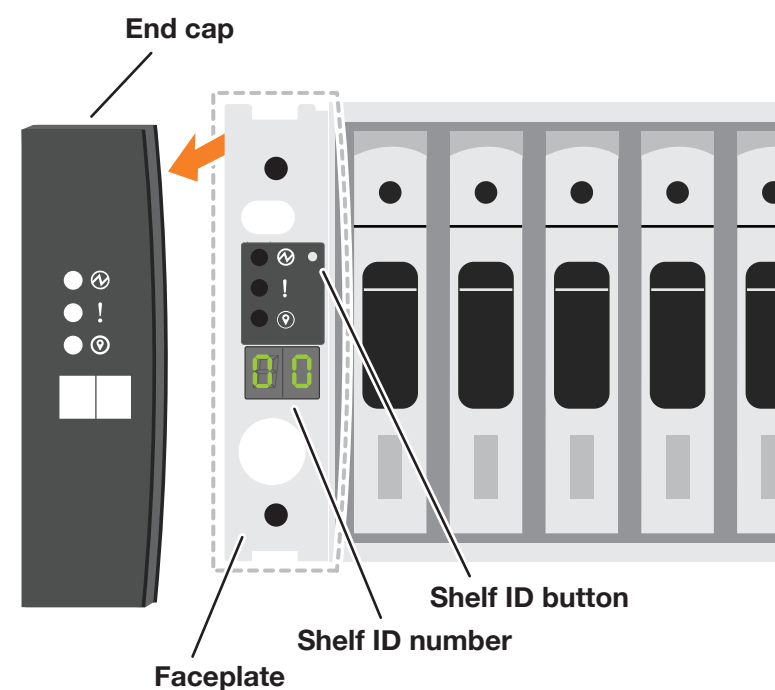
1 Power on the shelves and set shelf IDs:

Note: For NS224 drive shelves, shelf IDs are pre-set to 00 and 01. If you want to change the shelf IDs, use the straightened end of a paperclip, or narrow tipped ball point pen to access the shelf ID button behind the faceplate.

1. Plug the power cords into the shelf power supplies, and then connect them to power sources on different circuits.

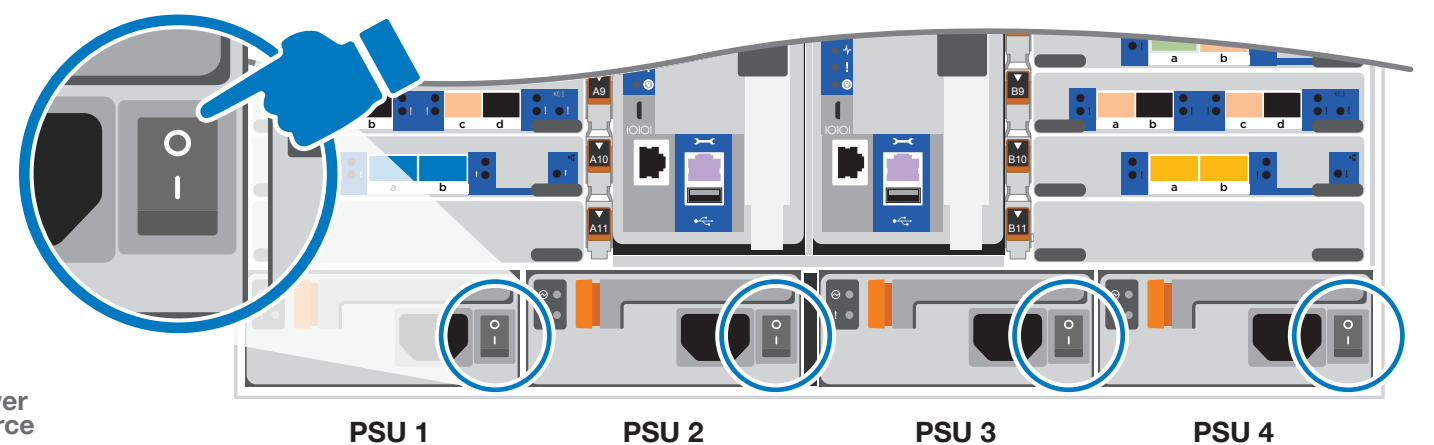
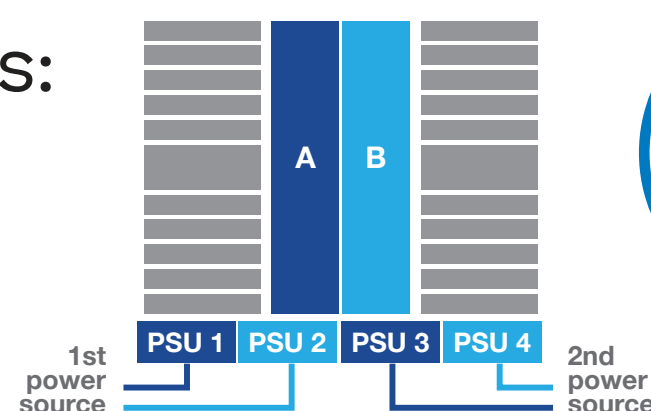
Note: NS224 shelves have no power switch and will begin to boot.

2. If you need to change the shelf ID's, see [Change a shelf ID - NS224 shelves](#) for detailed instructions.



2 Turn on the power switches to all nodes:

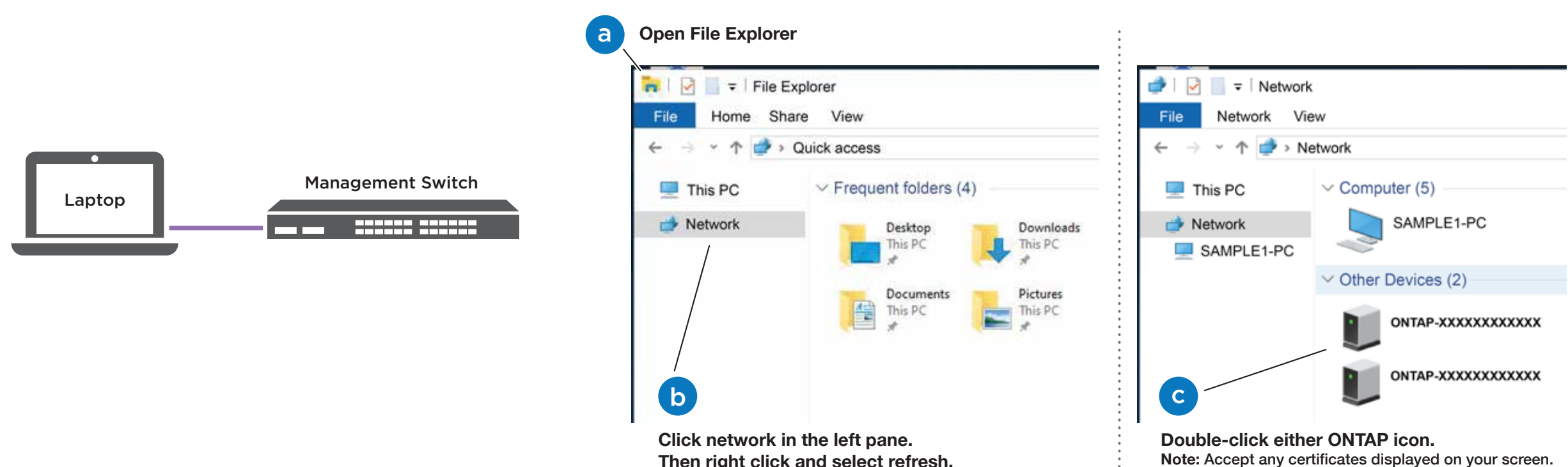
PSU 1 and PSU 3 provide power to all side A FRUs, PSU 2 and PSU 4 provide power to all side B FRUs.



3 Complete initial cluster setup with network discovery:

Note: If your laptop does not support network discovery, see the [Detailed guide](#).

Connect your laptop to the management switch and access the network computers and devices.



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) [Register your system](#)
2. Download and install Active IQ Config Advisor. 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.