

AFF A320 Systems Installation and Setup Instructions

Prepare for installation | Stage 1

Pre-setup

- Click...
 - mysupport.netapp.com
 - [Create/log in to your account](#)
 - [Download and install Active IQ Config Advisor](#)
 - [Register your system](#)
 - [Get your license keys](#)
- Unpack all boxes and inventory contents.
- If you are not already in the AFF and FAS System Documentation Center, go to [AFF and FAS System Documentation Center](#); click AFF A320 systems; click Installation and Setup:
 - Download and complete the [Cluster Configuration Worksheet](#).
 - Watch the videos listed under [Setup videos](#).

In the box

100 GbE cable (QSFP28)

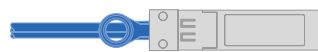
Storage, cluster interconnect/HA, and Ethernet data (order-dependent)



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

40 GbE cable

Storage, cluster interconnect/HA, and Ethernet data (order-dependent)



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

RJ-45 cables

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



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

Ethernet cable - MPO



Part numbers:
 X66200-2 (112-00326), 2m
 X66250-5 (112-00328), 5m
 X66250-30 (112-00331), 30m

Optical cables

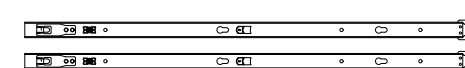
FC configuration



Part numbers SR:
 X6553-R6 (112-00188), 2m
 X6554-R6 (112-00189), 15m
 X6537-R6 (112-00091), 30m

Part numbers LR:
 X66250-3 (112-00342), 2m
 X66260-5 (112-00344), 5m
 X66260-30 (112-00354), 30m

Slide rail kit



Additional cables



Ethernet cables

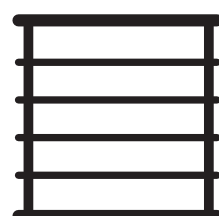


micro USB console cable

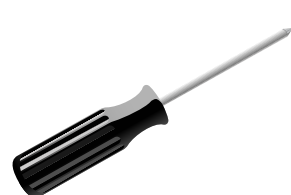


Power cables

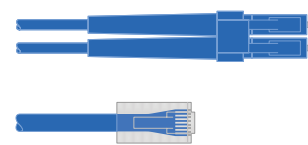
You provide



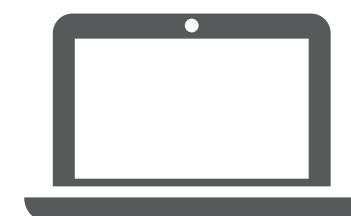
Rack space
 2U for AFF A320
 + 2U for NS224



Screwdriver
 Phillips #2



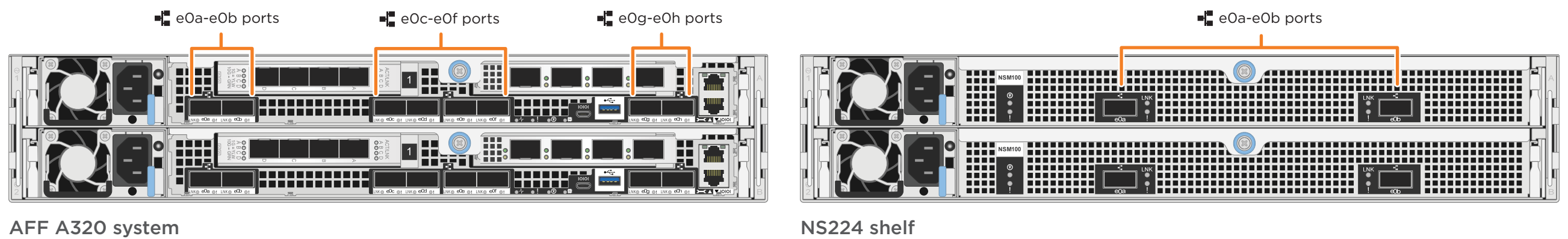
Additional network cables
 For connecting your storage system to your network switch and laptop or console.



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

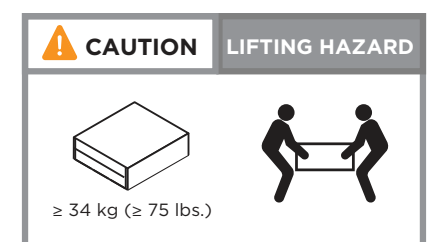
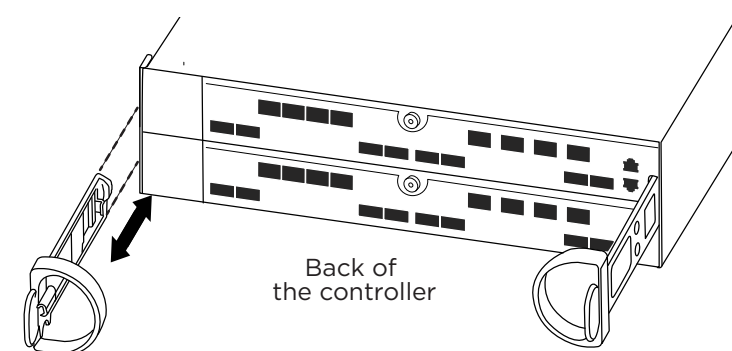
Install hardware | Stage 2

1 Rear view of the AFF A320 and NS224 shelf



2 Install system in a rack or cabinet

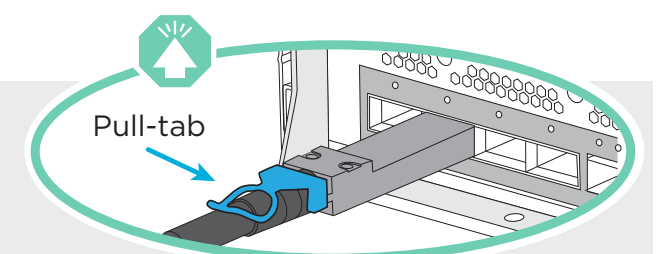
- Install the rail or telco tray kits, as needed, and then install and secure your system using the instructions included with the kit.
- Attach cable management devices to the back of each controller (as shown).
- Place the bezel on the front of the system.
- Install any drive shelves for your system.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



3 Cable the controller for a switchless or switched cluster

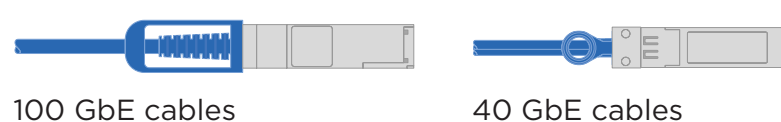
See your network administrator for help connecting to your switches.

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.



Cluster interconnect and HA cables

- OPTION A:** If you have a switchless cluster, connect ports e0a to e0a and e0d to e0d.
OPTION B: If you have a switched cluster, connect ports e0a and e0d to the cluster switch.



100 GbE cables

40 GbE cables

- Connect ports e0g and e0h to the 40 GbE or 100 GbE data network switches (optional, configuration dependent).



100 GbE cables

40 GbE cables

FC cables

- Connect your Ethernet cards (NICs) or FC cards to the appropriate Ethernet or FC switches (optional, configuration-dependent).



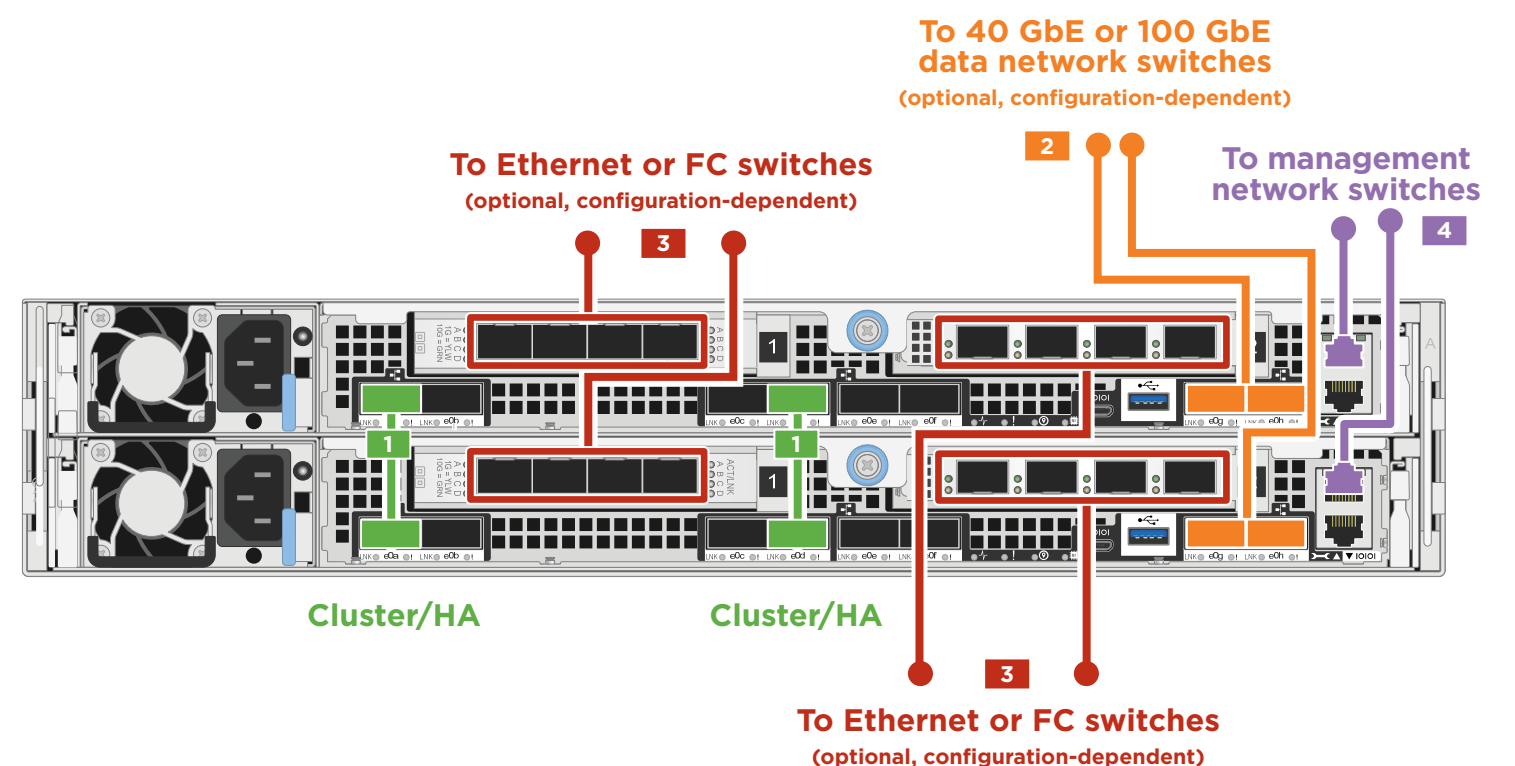
Ethernet cables

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

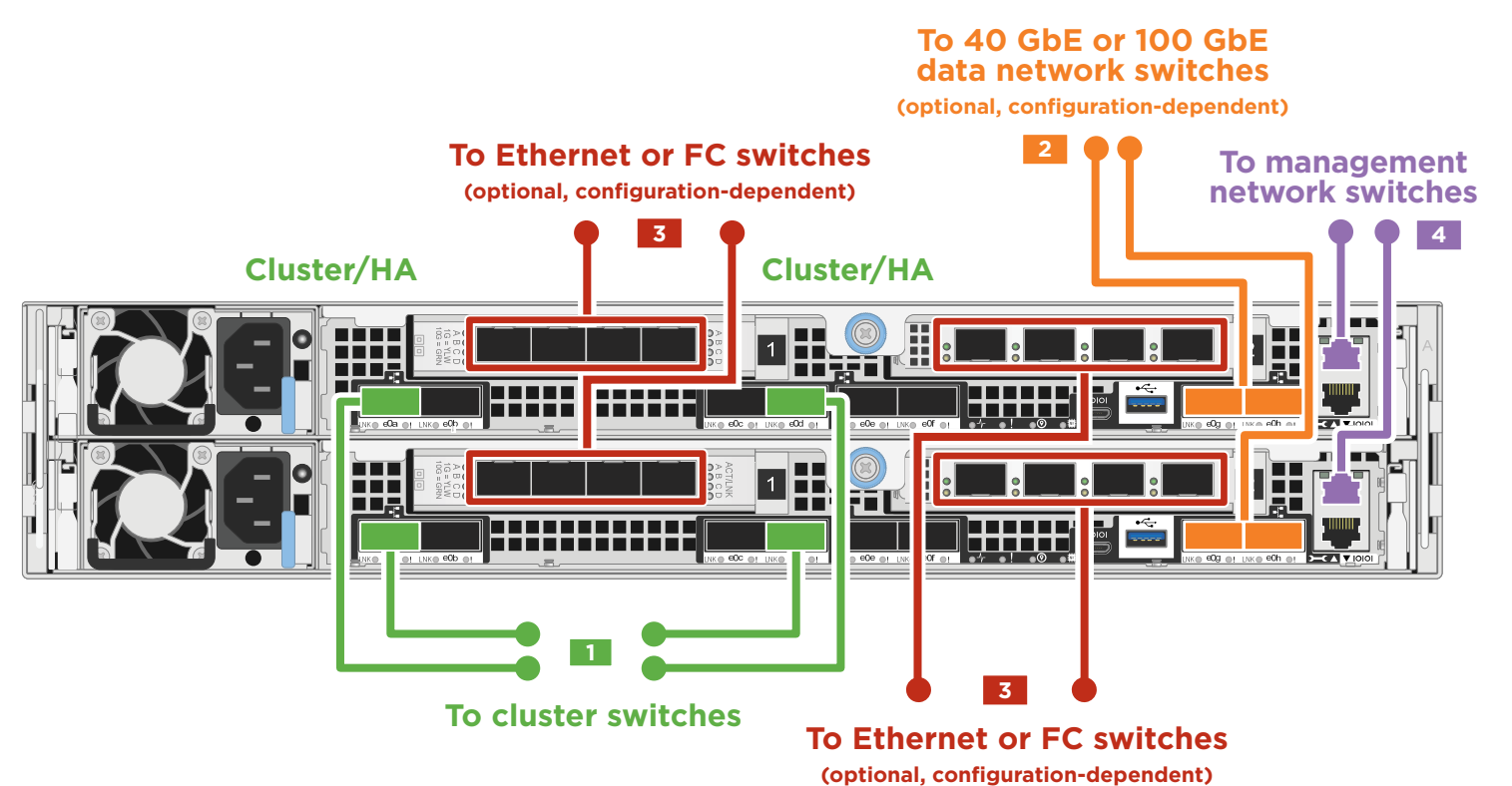
- Strap the cables to the cable management arms. (not shown)

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.

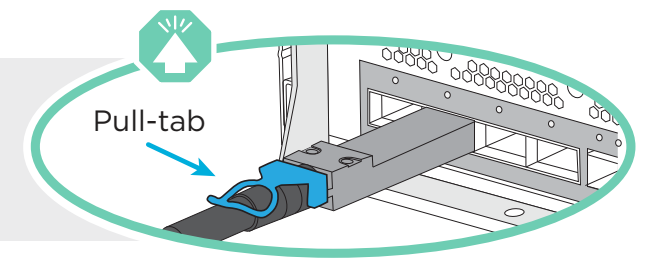
A Switchless cluster



B Switched cluster



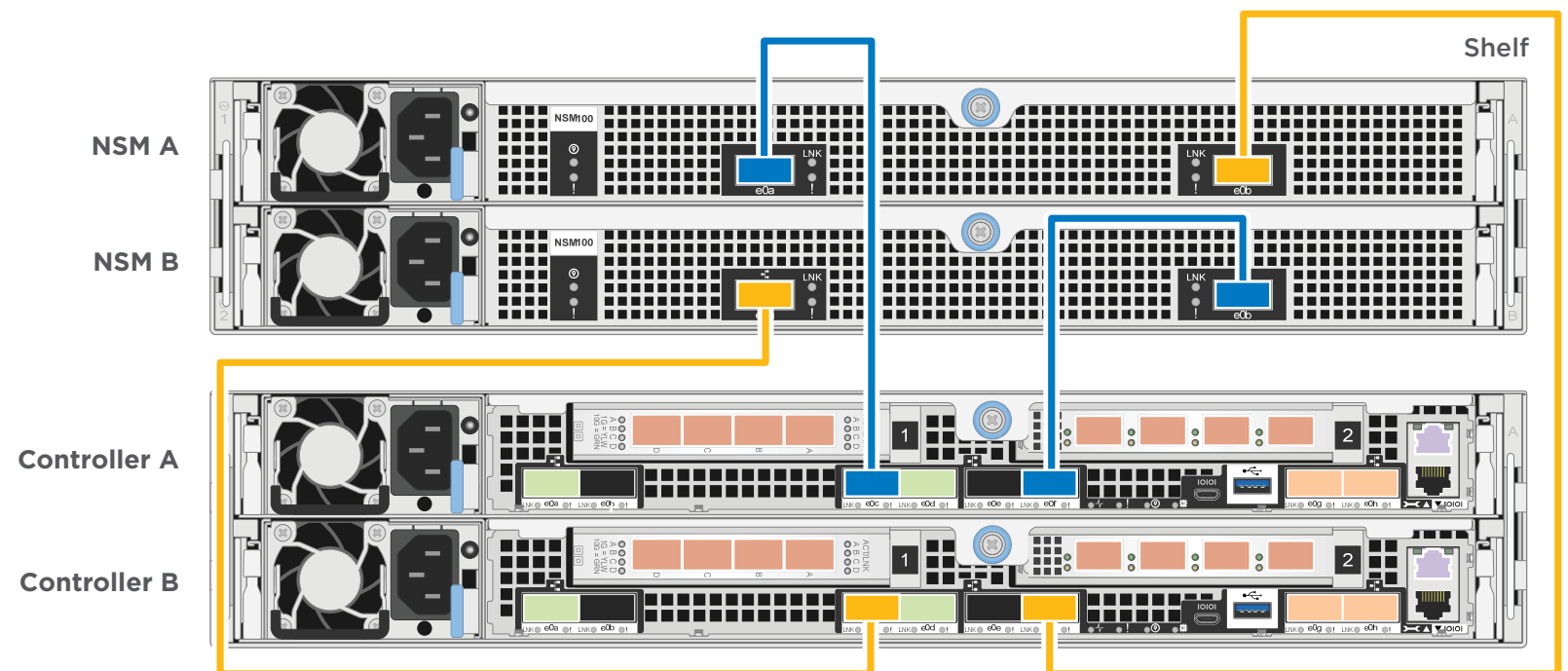
Attention: Be sure to check the illustration arrow for the proper cable connector pull-tab orientation.
 Note: To unplug a cable, gently pull the tab to release the locking mechanism.



A Cabling an AFF A320 system to one NS224 shelf

 100 GbE QSFP28 copper cable

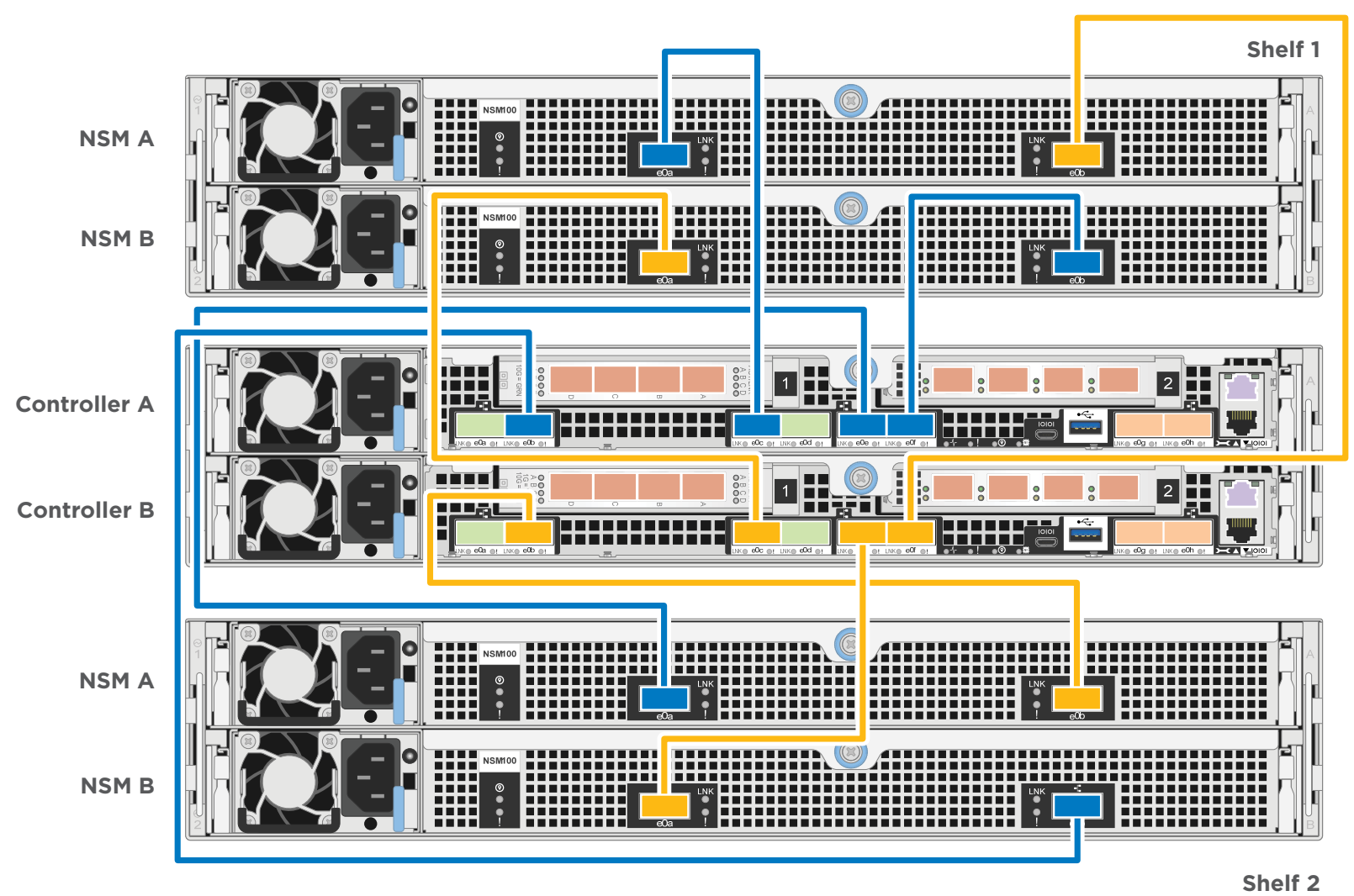
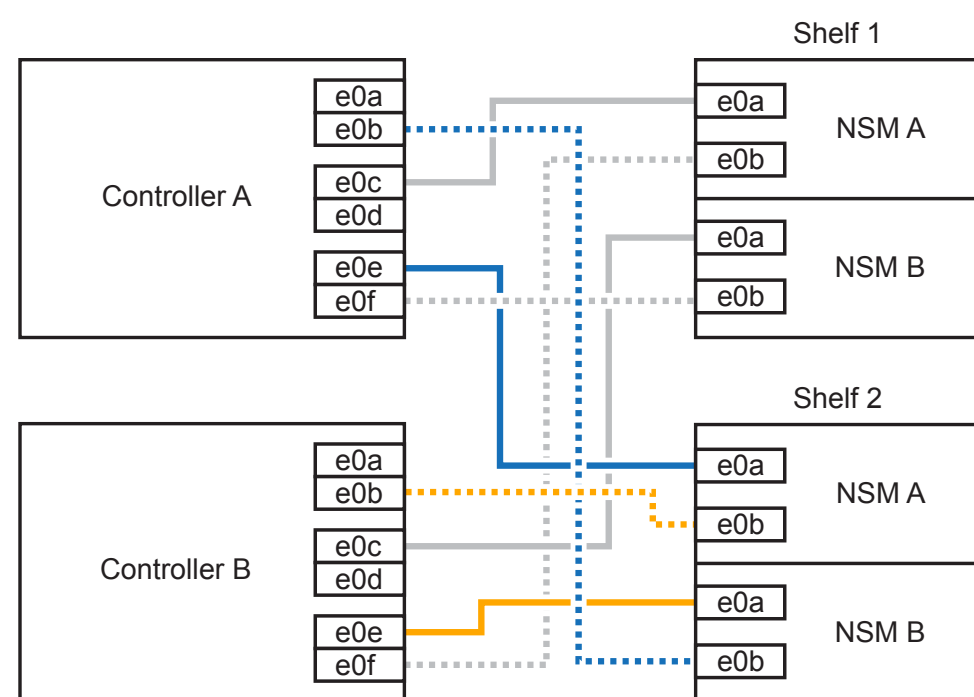
- 1** Connect controller A port e0c to port e0a on NSM A on the shelf.
 Connect controller A port e0f to port e0b on NSM B on the shelf.
- 2** Connect controller B port e0c to port e0a on NSM B on the shelf.
 Connect controller B port e0f to port e0b on NSM A on the shelf.



B Cabling an AFF A320 system to two NS224 shelves

 100 GbE QSFP28 copper cable

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



Complete system setup and configuration | Stage 4

1 Power on

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.

2 Complete initial cluster setup:

Ensure the controller modules are completely cabled and then plug the power supplies in to the controllers and power sources.

OPTION A

If you have a Windows or Mac laptop:

1. Make sure that your laptop has network discovery enabled. See your laptop's help for more information.
2. Connect your laptop to the Management switch.



3. Go to network devices and double-click either ONTAP icon.

Note: Accept any certificates displayed on your screen.



OPTION B

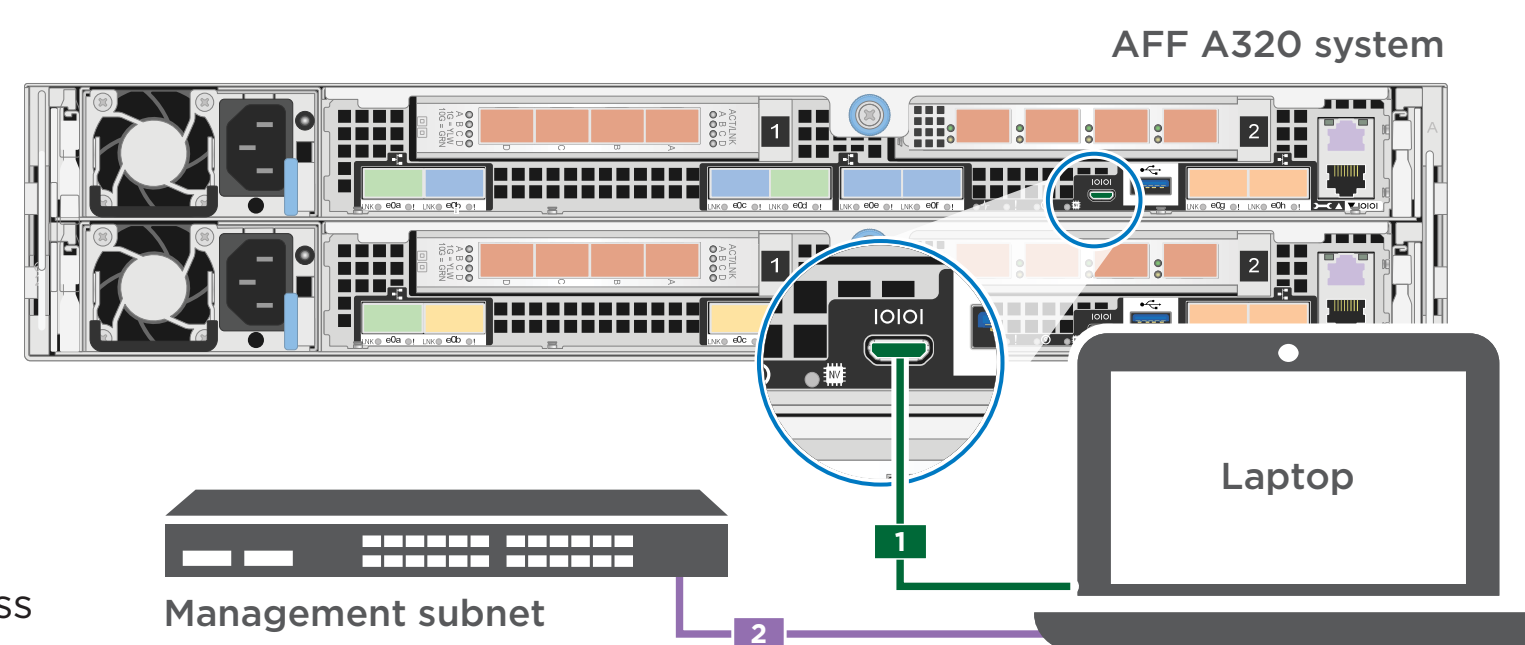
If you have a non-Windows or Mac laptop:

— micro USB console cable

- 1 Set the console port on the laptop to 115,200 baud with N-8-1, connect to the micro-USB port on the controller with the console cable.

— Ethernet cable

- 2 Connect the laptop to the Management switch and give the laptop a TCP/IP address on the management switch
- 3 Assign an initial node management IP address to one of the nodes. If you have DHCP configured on your management network, record the IP address assigned to the new controllers. Otherwise use Cluster Setup wizard to assign the node management IP address.
 - a. Open a console session using PuTTY, a terminal server, or the equivalent for your environment.
 - b. Enter the management IP address when prompted by the script.
- 4 Open a browser and enter management IP address. (<https://xxx.xxx.xxx.xxx>)



3 Use System Manager Guided Setup to configure your cluster

4 Completing setup

1. Verify the health of your system by running Config Advisor.
2. After you have completed the initial configuration, go to the [NetApp ONTAP Resources](#) page for information about configuring additional features in ONTAP.