FAS2800 Systems
Installation and Setup Instructions

❚❙ NetApp®

Prepare and install | Stage 1

Pre-setup

1. Unpack all boxes and inventory contents.
   Attention: Customers with specific power requirements must check Hardware Universe for their configuration options.
2. Gather information about your storage system by completing the cluster setup worksheets:
   Get started with ONTAP cluster set up.
3. Review the requirements and procedure steps for Configure ONTAP on a new cluster with System Manager.
   Note: For MetroCluster configurations, use the MetroCluster installation content.

Contents in the box

Cables shown are the most common. See Hardware Universe for more options.
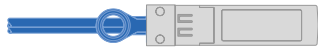
10Gb Ethernet, SFP28
Network cable
Part numbers X6566B-05-R6, .5m; X6566B-2-R6, 2m

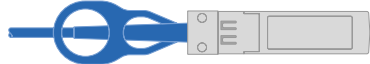**25Gb Ethernet, SFP28**
Network cable
Part numbers X66240A-05, .5m; X66240-2, 2m; X66240A-5, 5m

10GBASE-T, RJ45
Network cable
Part numbers X6561-R6; X6562-R6

MiniSAS HD cable
Storage connections
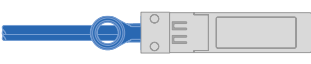Part numbers X66030A, 0.5m; X66031A, 1m; X66032A, 2m

32Gb Fiber Channel, SFP+ (target/initiator)
Network cable
Part numbers X66250-2, 2m; X66250-5, 5m; X66250-15, 15m

Additional cables

- **Ethernet cables**

- **Power cables**

Cable management tray

Slide rail kit

You provide

✅ **Rack space**
2U for platform +2U for each NS224 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 storage system in a rack or cabinet

1. Use the rail or telco kit instructions to install the controllers and shelves in the rack. Use the 42U 1280 mm System Cabinet Guide for cabinet installation.
2. Attach the cable management devices to the back of each controller (as shown).
3. Place the bezel on the front of the system.

Back of the controller

⚠ **CAUTION** **LIFTING HAZARD**
≥ 41.23 lbs (≥ 18.7 kg)
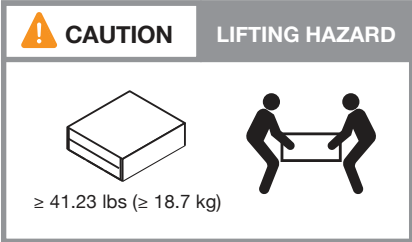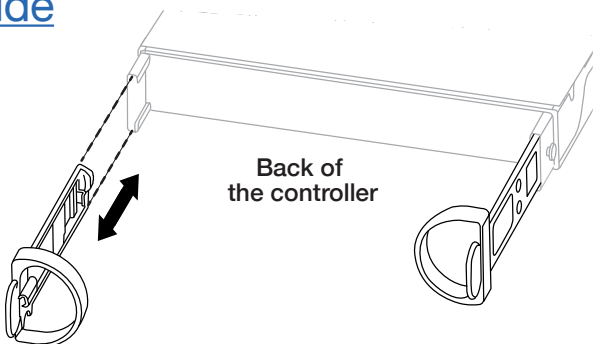
Cable controllers | Stage 2
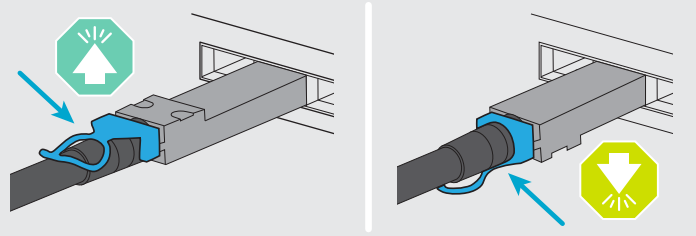
1 Cable the controllers for a switchless or switched cluster

See your network administrator for help connecting to your switches.

Cluster interconnect cable

1 Switchless cluster
Connect port e0a to port e0a and port e0b
to port e0b. (Part # X66240A-05, .5m)

Switched cluster
Connect port e0a and port e0b on each controller
to the cluster interconnect switches.

Ethernet cable

2 Connect the wrench port (e0M+BMC) on both control-
ler modules to the management subnet switches.

3 Cables used are dependent on what mezzanine
card is installed. See page 1 for cable part numbers
and descriptions and match them to the cables in
your shipment.

4-ports, 10/25Gb Ethernet, SFP28
4-ports, 32Gb Fiber Channel, SFP+ (target only)
4-ports, 32Gb Fiber Channel, SFP+ (initiator/target)
4-ports, 10GBASE-T, RJ45

Cable ports e1a through e1d to your Ethernet data
network or ports e1a through e1d for your FC network.
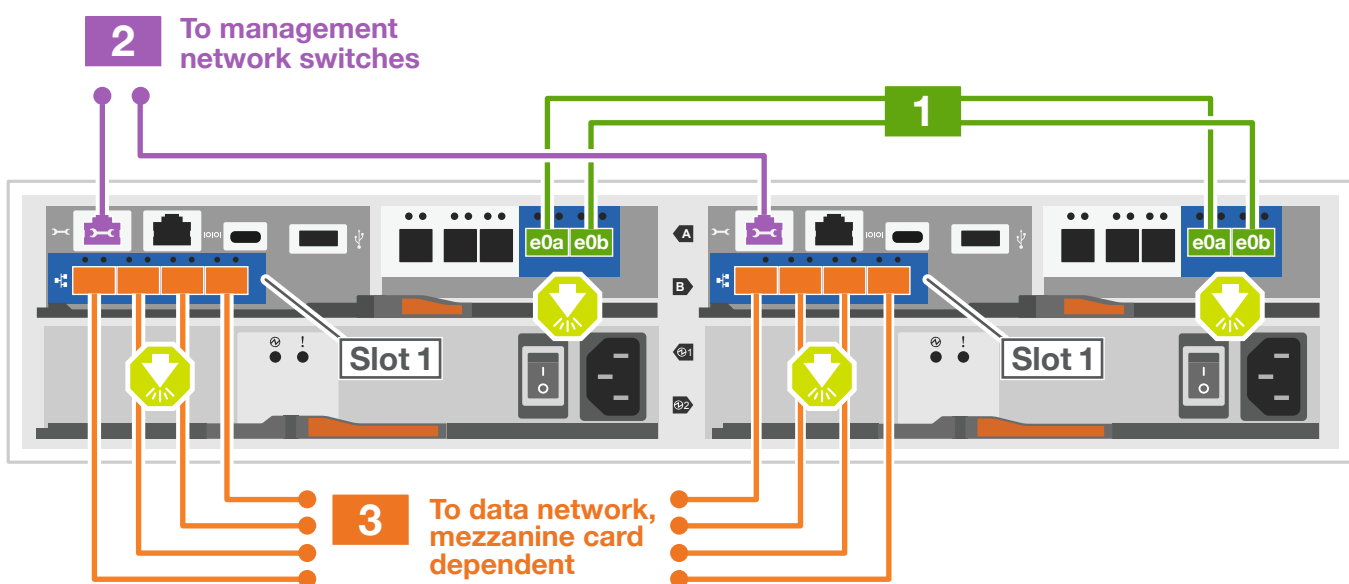
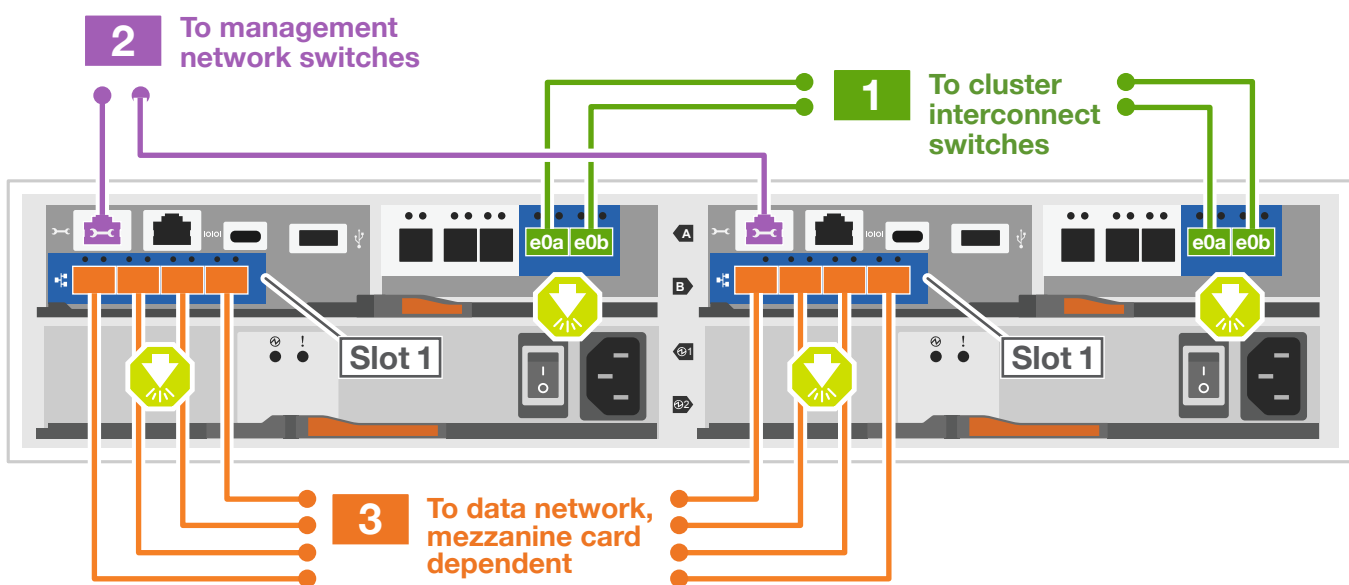**2-ports, 10/25Gb Ethernet (SFP28) + 2-ports 32Gb FC (SFP+)**

Cable ports 1a and 1b to your FC data network and
ports e1c and e1d to your Ethernet data network.

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

Switchless cluster

2 To management network switches
1
3 To data network, mezzanine card dependent
Slot 1
Slot 1

Switched cluster

2 To management network switches
1 To cluster interconnect switches
3 To data network, mezzanine card dependent
Slot 1
Slot 1

2 Connect both power cords

Power cables

1. Connect the power cables to each controller's power supply,
   and then to power sources on different circuits.
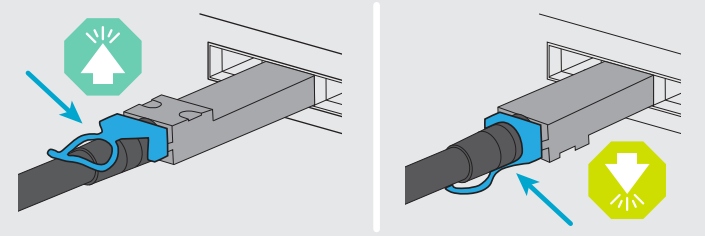2. Secure the power cables using the securing device on each power supply.

DO NOT turn on the power supply switches.

Controller A	Controller B
PSU 1	PSU 2
Power source on circuit A	Power source on circuit B

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.

3 Cable the storage

FAS2800 series to external DS224C or DS212 drive shelves

Note: See SAS cabling rules, worksheets, and examples overview - shelves with IOM12/IOM12B modules for cabling worksheets and additional cabling examples.
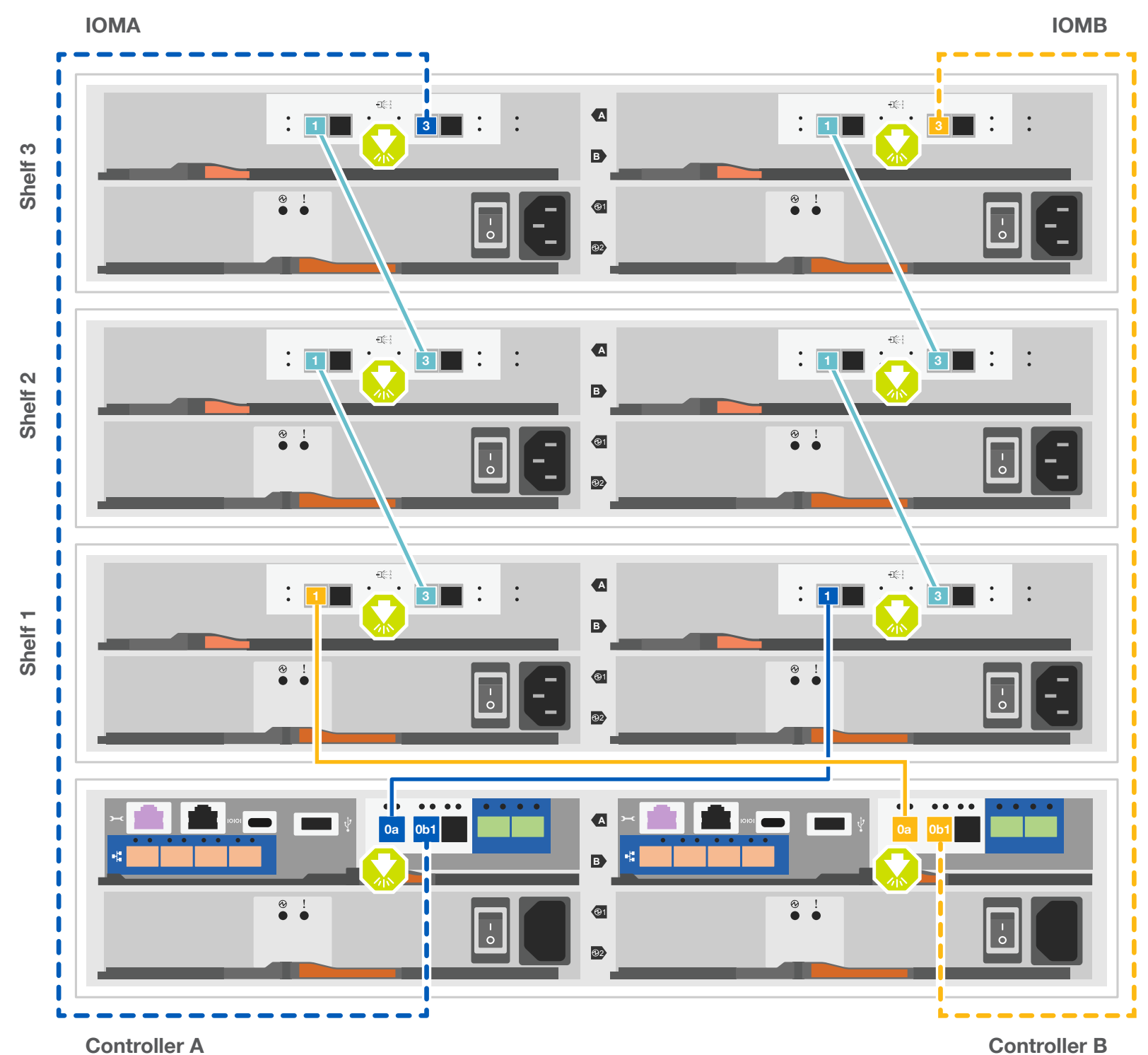
Storage cables

Use the tables below to connect your controllers to three DS224C shelves.

Shelf to shelf

Shelf 1				Shelf 2				Shelf 3			
IOMA		IOMB		IOMA		IOMB		IOMA		IOMB	
1	3	1	3	1	3	1	3	1	3	1	3

Shelf to controllers

|			Shelf 1				Shelf 2				Shelf 3			
			IOMA		IOMB		IOMA		IOMB		IOMA		IOMB	
			1	3	1	3	1	3	1	3	1	3	1	3
Controller	A	0a												
		0b1												
	B	0a												
		0b1												

1 Power on the shelves and set shelf IDs

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

2. If you need to change the shelf IDs, continue with substeps a through e; otherwise, skip to "Power on the controllers" below.

    a. Remove the end cap.

    b. Press and hold shelf ID button until 1st digit blinks, then push to advance to 0-9.
       Note: The first digit continues to blink.

    c. Press and hold shelf ID button until 2nd digit blinks, then push to advance to 0-9.
       Note: The first digit stops blinking, and the second digit continues to blink.

    d. Replace the end cap.

    e. Wait 10 seconds for the Amber LED (!) to appear, then power-cycle the drive shelf to set shelf ID. Repeat these steps for any remaining drive shelves.
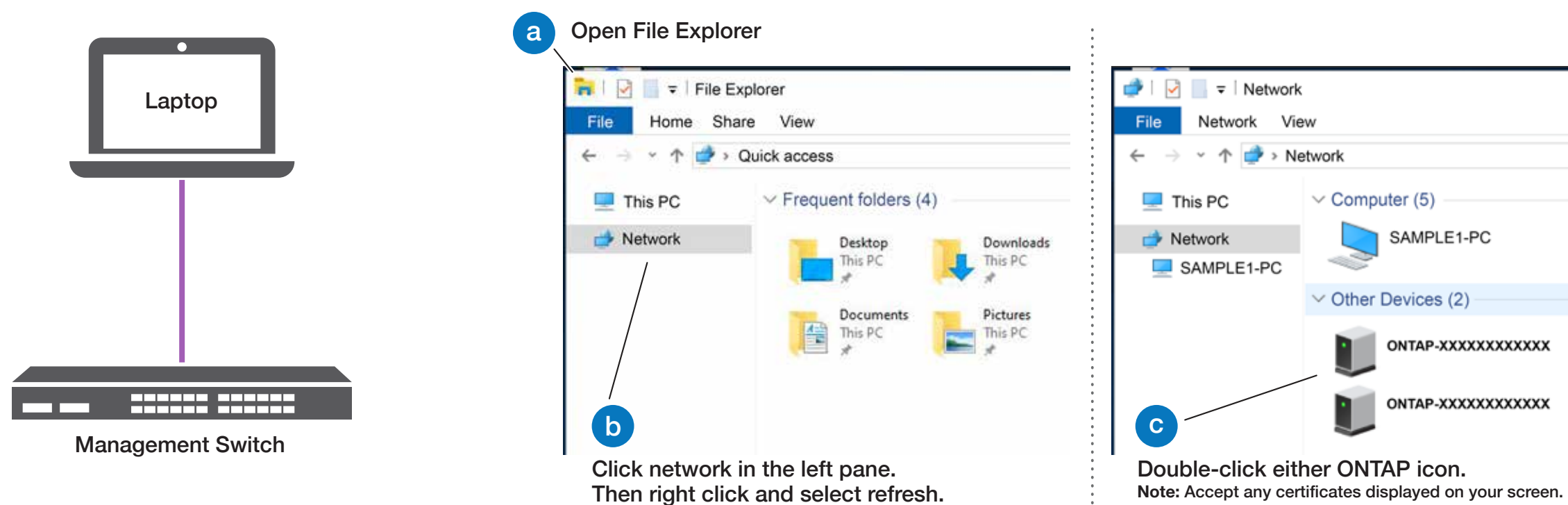
End cap

Shelf ID number

Faceplate

Shelf ID button
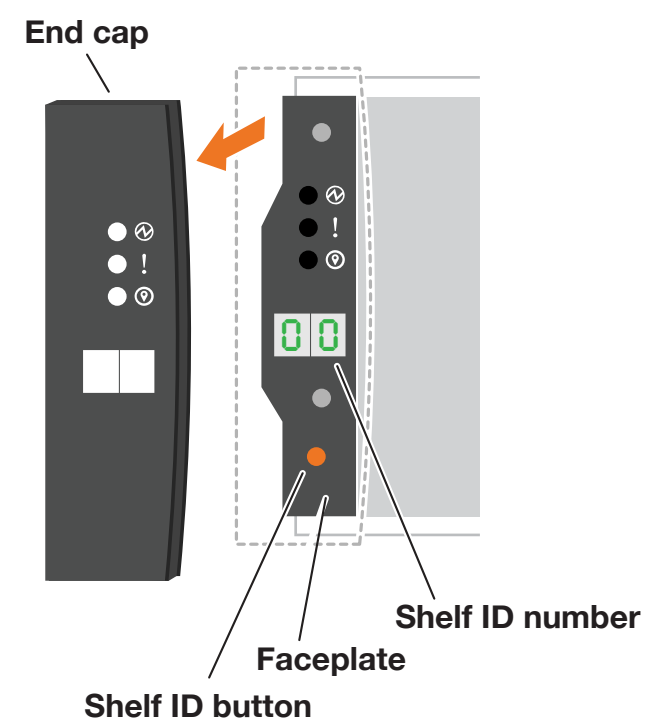
2 Turn on the power switches to all nodes
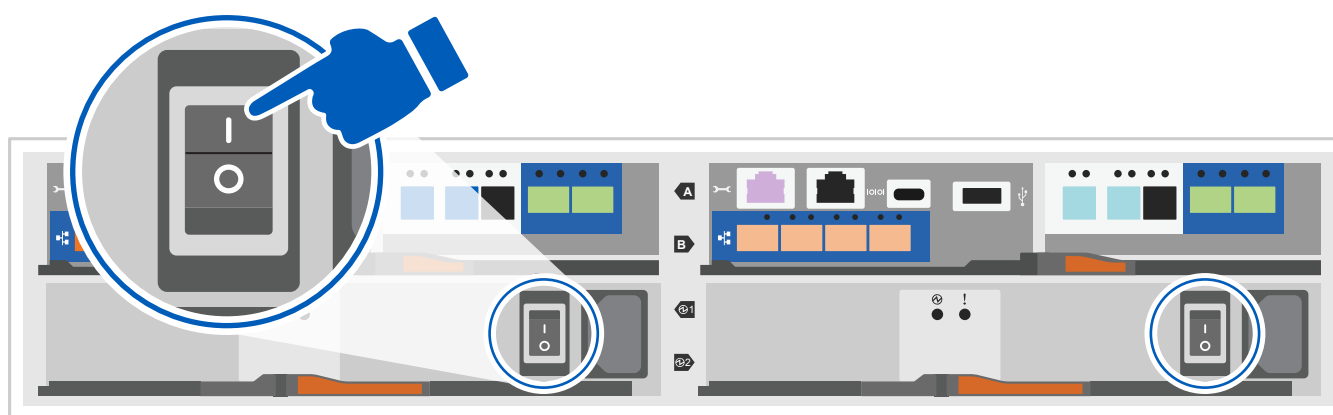
3 Complete the initial cluster setup with network discovery

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

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

Laptop

Management Switch

a Open File Explorer

b Click network in the left pane. Then right click and select refresh.

c Double-click either ONTAP icon.
Note: Accept any certificates displayed on your screen.

4 Configure your cluster using the [Configure ONTAP on a new cluster with System Manager](#) procedure

5 Complete the 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](#), and then run it to verify the health of your storage system.

3. After you have completed the initial configuration, go to the [NetApp ONTAP Resources](#) page for information about configuring additional features in ONTAP.