Cable the Data Hosts

Cable the system according to your network topology.
NOTE: If you are using AIX®, you must install the E-Series multipath driver on the host before connecting it to the array.
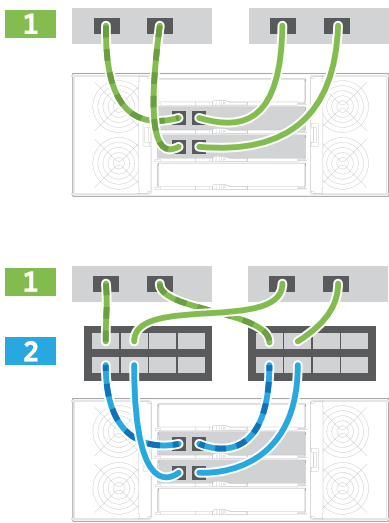
A Option — Direct-attach topology

1 Connect each host adapter directly to the host ports on the controllers.

B Option — Fabric topology

1 Connect each host adapter directly to the switch.
2 Connect each switch directly to the host ports on the controllers.

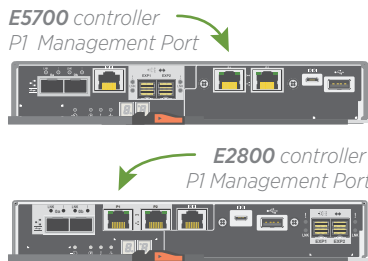### A Option — Management port configuration with DHCP

Before you begin, your DHCP server is configured to associate an IP address, subnet mask, and gateway address as a permanent lease for each controller.

You have obtained the assigned IP addresses you will use to connect to the storage system from your network administrator.

1 Connect an Ethernet cable to each controller's management port, and connect the other end to your network. (See the graphic identifying the management port.)

2 Open a browser and connect to the storage system using one of the IP addresses provided to you by your network administrator.

B Option — Management port configuration with static IP addresses

E5700 controller
P1 Management Port

E2800 controller
P1 Management Port

Before you begin, you have obtained the controllers' IP addresses, subnet mask, gateway address, DNS, and NTP server information from your network administrator.

A connection with the controller requires the laptop to boot with no configured network settings. Verify that the laptop is not receiving network configuration from a DHCP server over a wireless connection.

1 Using an Ethernet cable, connect controller A's management port to the Ethernet port on a laptop.

2 Open a browser and use the default IP address (169.254.128.101) to establish a connection to the controller. The controller sends back a self-signed certificate. The browser informs you that the connection is not secure.

3 Follow the browser's instructions to proceed and launch SANtricity System Manager.

If you are unable to establish a connection, verify that you are not receiving network configuration from a DHCP server.

4 Set the storage system's password to login.

5 Use the network settings provided by your network administrator in the Configure Network Settings wizard to configure controller A's network settings, and then select Finish.

Because you reset the IP address, System Manager loses connection to the controller. This is expected.

6 Disconnect your laptop from the storage system, and connect the management port on controller A to your network.

7 Open a browser on a computer connected to your network, and enter controller A's newly configured IP address.

Attention: If you lose the connection to controller A, you can connect an ethernet cable to controller B to reestablish connection to controller A through controller B (169.254.128.102).

8 Log in using the password you set previously. The Configure Network Settings wizard will appear.

9 Use the network settings provided by your network administrator in the Configure Network Settings wizard to configure controller B's network settings, and then select Finish.

10 Connect controller B to your network.

11 Validate controller B's network settings by entering controller B's newly configured IP address in a browser.

Attention: If you lose the connection to controller B, you can use your previously validated connection to controller A to reestablish connection to controller B through controller A.
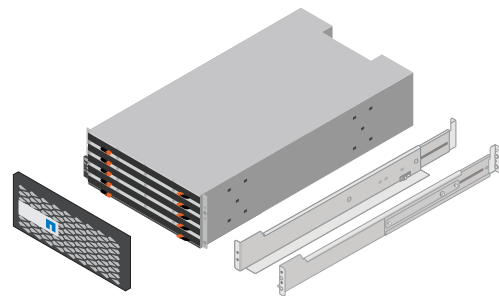
After Installing the Hardware

1 Use the SANtricity software to configure and manage your storage arrays.

2 In the simplest network configuration, connect your controller to a web browser and use SANtricity System Manager for managing a single E2800 or E5700 series storage array.

NetApp®

E-Series E2860, E5760 and DE460C Shelves

Installation and Setup Instructions

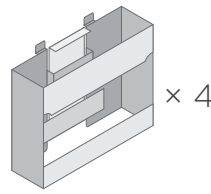## Prepare for Installation | 1

- Create an account and register your hardware at mysupport.netapp.com.
- Inventory cables and make note of the quantity.
- Confirm that your location provides 240V AC power.

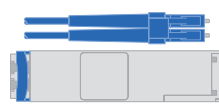**In the box**

- Shelf, bezel, and rackmount hardware
- Shelf handles × 4
- Ethernet cables if ordered
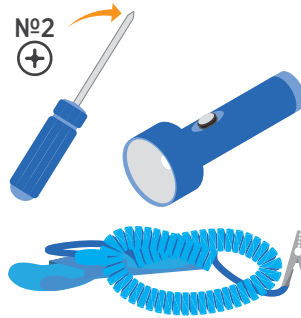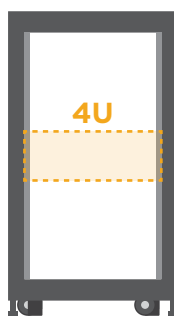- SAS cables included only with the drive shelves
- I/O cables if ordered
- Power cables two for each shelf

You provide

- Phillips №2 screwdriver, flashlight, and ESD strap
- 4U rack space

A 19 in. (48.30 cm) rack to fit 4U shelves of the following dimensions:
Height: 6.87 in. (17.46 cm)
Width: 17.66 in. (44.86 cm)
Depth: 38.25 in. (97.16 cm)
Max Weight: 250 lb. (113 kg)

- A supported browser for the management software

Resources

Cabling Guide
docs.netapp.com/ess-11/topic/com.netapp.doc.e-hw-cabling/home.html

Hardware Universe
hwu.netapp.com

NetApp Interoperability Matrix
mysupport.netapp.com/matrix

Quick Connect Utility
mysupport.netapp.com/quickconnect

E-Series Documentation Center
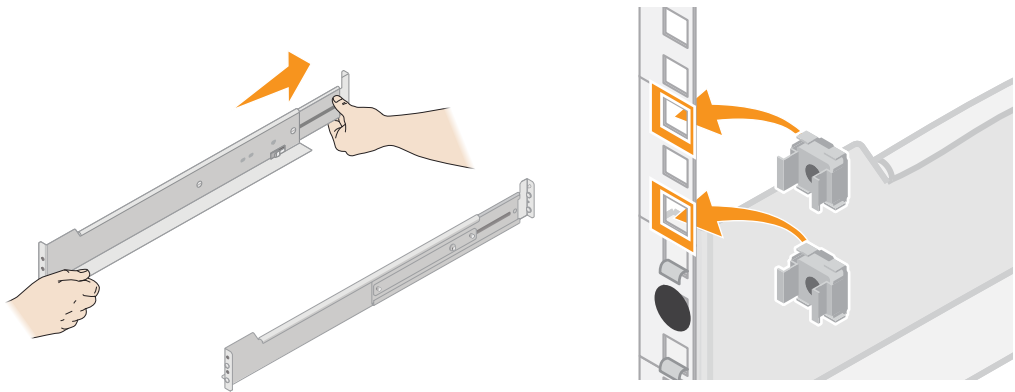http://docs.netapp.com/ess-11/index.jsp

210-06769-C0

❶ Unpack the Hardware

Unpack the contents and inventory the contained hardware against the packing slip. Read through all the instructions before proceeding.

❷ Install the Rails

See the enclosed document, *Installing SuperRail into a four-post rack* for instructions on how to install the rails.
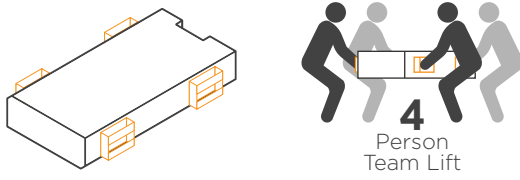
NOTE: For square hole cabinets, you must first install the provided cage nuts to secure the front and rear of the shelf with screws.
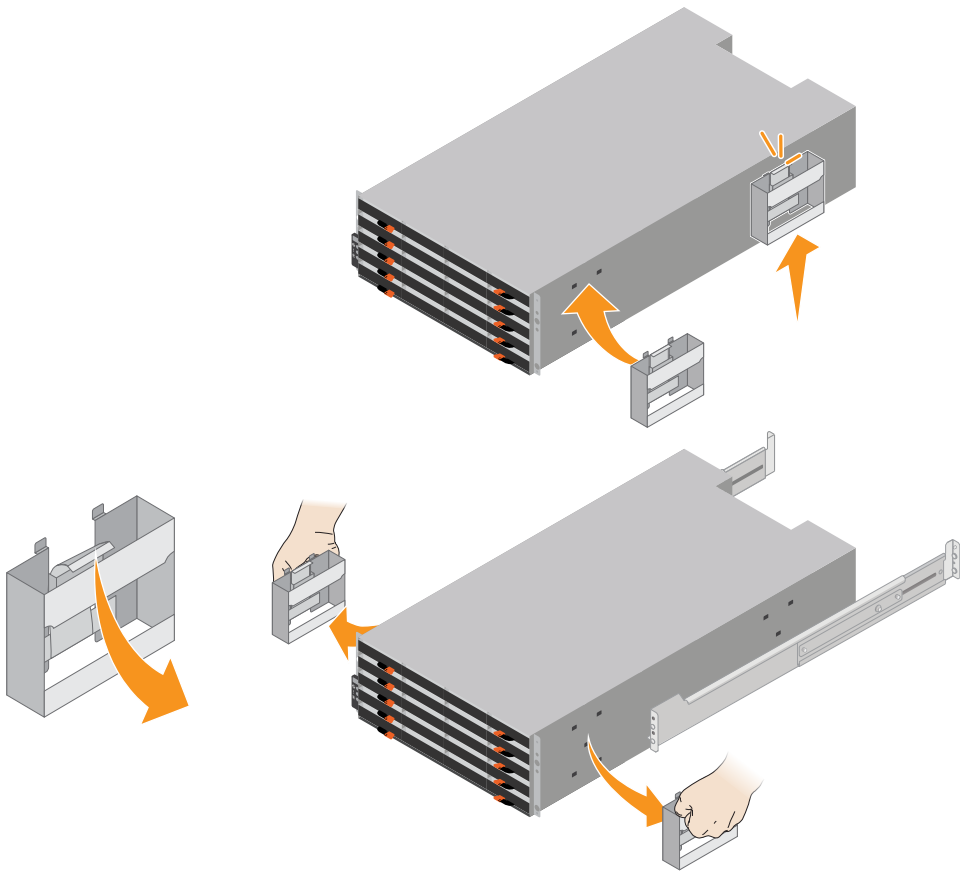
❸ Install the Shelf

1 If lifting the shelf by hand, attach the four lift handles. Push up on each handle until it clicks into place.

⚠ **CAUTION**: An empty shelf weighs approximately 132 lb (60 kg). A mechanized lift or four people using lift handles are required to safely move an empty shelf.

4
Person
Team Lift

2 Supporting the shelf from the bottom, slide it into the cabinet. If the lift handles are used, remove them one set at a time as the shelf slides into the cabinet. To remove the handles, pull back on the release latch, push down, then pull away from the shelf.

❹ Secure the Shelf

1 Insert screws into the first and third holes from the top of the shelf on both sides to secure it to the front of the cabinet.

2 Place two back brackets on each side of the upper rear section of the shelf. Insert screws into the first and third holes of each bracket to secure the back of the cabinet.
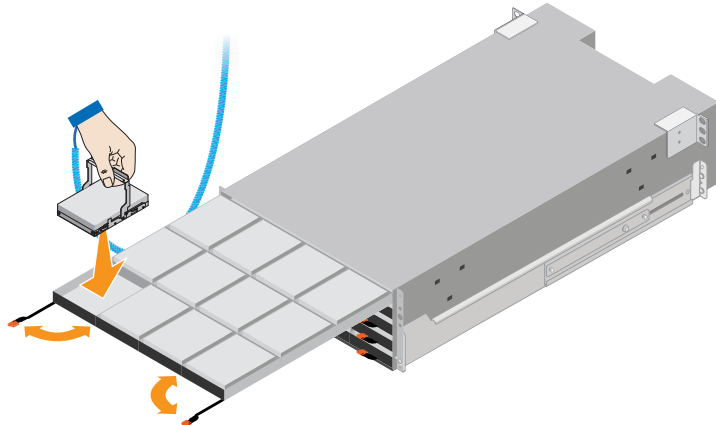
❺ Install the Drives

1 Wrap the strap end of the ESD wristband around your wrist, and secure the clip end to a metal ground to prevent static discharges.

2 Starting at the front left slot of the top drawer, install each drive by gently positioning into the drive slot and lowering the raised drive handle until it clicks into place.

NOTE: If you are installing fewer than 60 drives, if you have solid-state drives (SSDs), or if your drives have different capacities:

- Maintain a minimum of 20 drives per shelf. Install drives in the front four slots in each drawer first, for adequate airflow for cooling.
- Distribute any remaining drives across the drawers. If possible, install an equal number of each type of drive in each drawer to allow for the creation of Drawer Loss Protected volume groups or disk pools.
- Distribute any SSDs evenly across the drawers.

3 Carefully slide the drawer back in by pushing the center and gently closing both latches.

4 Attach the front bezel.

ATTENTION: **Risk of equipment damage** — Stop pushing the drawer if you feel binding. Use the release levers at the front of the drawer to slide the drawer back out. Then, carefully reinsert the drawer into the slot.

Cable the Shelves

Cable the system according to your configuration. Examples are shown in this section. For more cabling options, see *Cabling E-Series Hardware*.

docs.netapp.com/ess-11/index.jsp
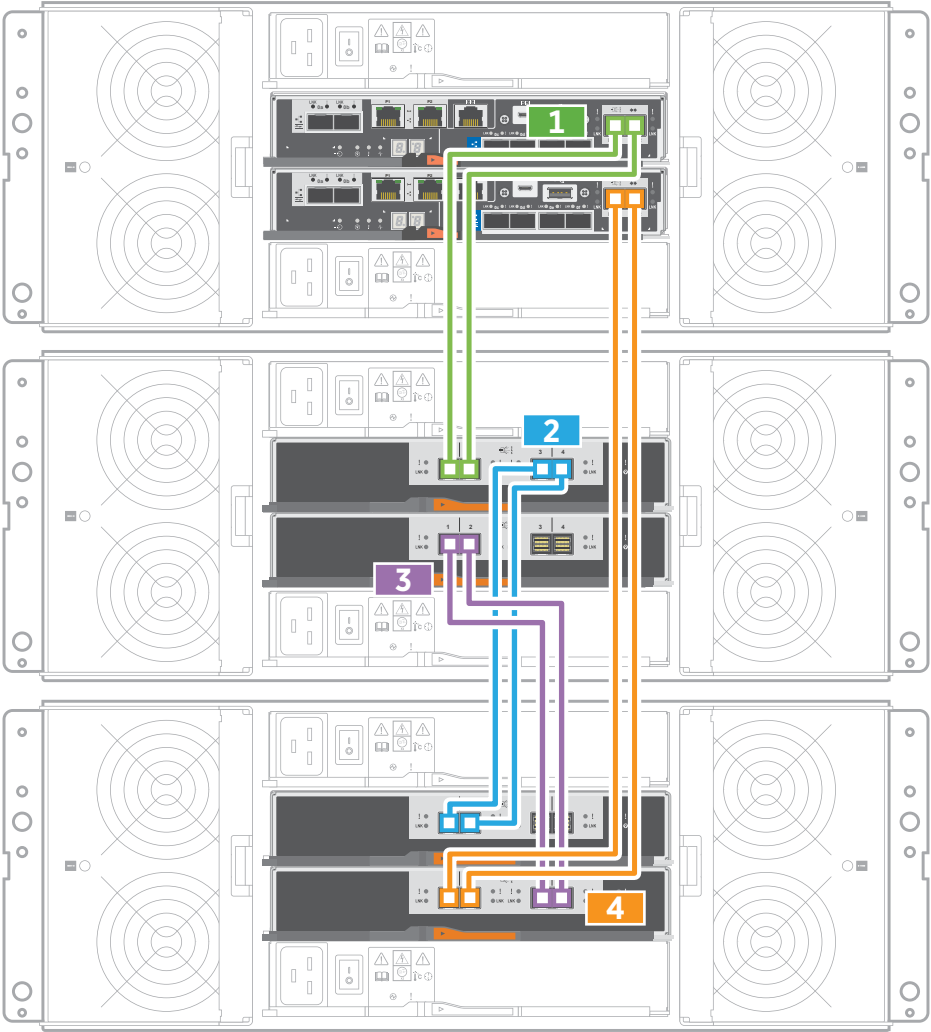
Cable a controller shelf and two drive shelves

A Example

- Storage cables

  1 Cable controller A to IOM A of the first drive shelf.

  2 Cable IOM A of the first drive shelf to IOM A of the second drive shelf.

  3 Cable IOM B of the first drive shelf to IOM B of the second drive shelf.

  4 Cable controller B to IOM B of the second drive shelf.

Example A: An E2860 controller shelf with two DE460C disk shelves in a standard SAS configuration

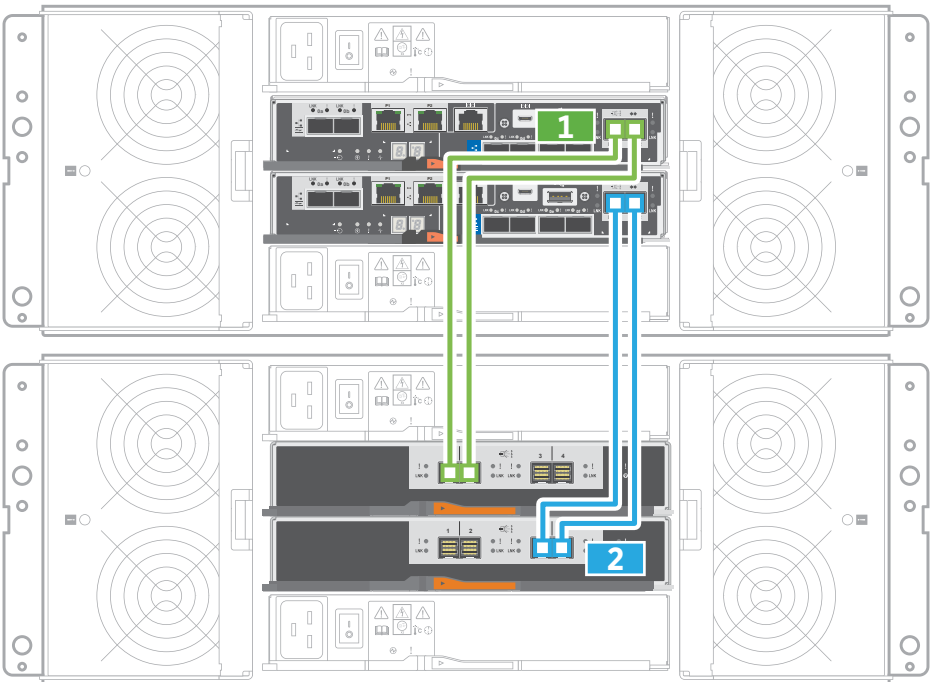### Cable a controller shelf and one drive shelf

B Example

- Storage cables

  1 Cable controller A to IOM A.

  2 Cable controller B to IOM B.

Example B: An E2860 controller shelf with one DE460C disk shelf in a standard SAS configuration

Power the Drive Shelves

| Power Cables

⚠ **CAUTION**: Confirm the drive shelf power switches are off.

1 Connect the two power cables for each shelf to different power distribution units (PDUs) in the cabinet or rack.

2 If you have drive shelves, turn on their two power switches first. Wait 2 minutes before applying power to the controller shelf.

3 Turn on the two power switches on the controller shelf.

4 Check the LEDs and seven-segment display on each controller.

During boot, the seven-segment display shows the repeating sequence of **OS, Sd, blank** to indicate the controller is performing start-of-day processing. After the controller has booted up, the shelf ID is displayed.

Example: Power connections are on the rear of the shelf.