

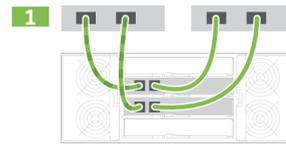
Cable the Data Hosts

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.

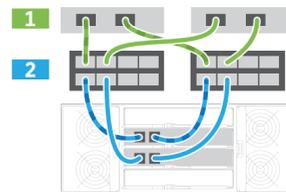
A Option Direct-attach topology

- 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.



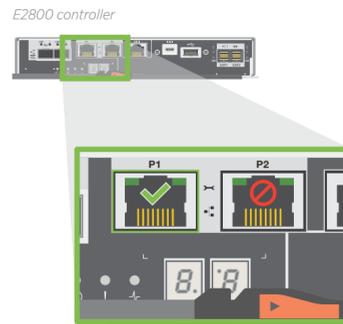
Connect and Configure the Management Connection

A Option Using the SANtricity Quick Connect Utility (automated management port configuration)

- 1 In a compatible web browser, navigate to mysupport.netapp.com/quickconnect to download the Quick Connect Utility. (User account required.)
- 2 Use an Ethernet cable to connect your controller's P1 port to the network.

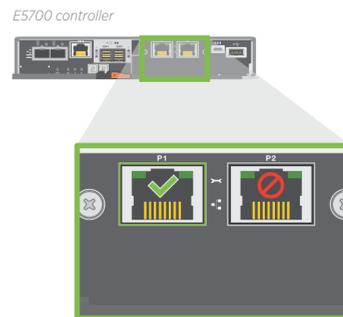
NOTE: Do not use P2 port. This port is reserved for NetApp technical support.

NOTE: When configuring the Quick Connect Utility for the first time, enter the user name "admin" and a password of your choosing.



B Option NOT using the SANtricity Quick Connect Utility (manual management port configuration)

- 1 Using an Ethernet cable, connect to controller A port 1 (P1) to the ethernet port on your laptop.
- 2 Manually specify the following IP address and subnet mask on the laptop's Ethernet port that you have physically connected to the storage array:
IP address: 192.168.128.100
Subnet mask: 255.255.255.0
- 3 Use the laptop's browser to access the storage array's management software using the following IP address:
IP address: 192.168.128.101
- 4 In the management software, go to the Hardware tab and select **Show back of shelf** under **Controller Shelf**. Highlight controller B, and then select **Configure management ports** to set the IP addresses for management port 1 on controller B. Do not configure management port 2. This port is reserved for NetApp technical support. After you have configured controller B's management port, repeat for controller A.
- 5 Disconnect your laptop from the storage array and connect an Ethernet cable to management port 1 (labeled P1) on each E2800 or E5700 controller and connect the other end to your network.



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.
- 3 In a more complex environment, install the client package in SANtricity Storage Manager and use the Enterprise Management Window (EMW) for managing multiple storage arrays.



E-Series E2860, E5760 and DE460C Shelves Installation and Setup Instructions

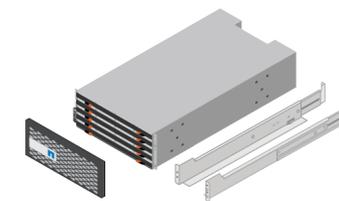


Prepare for Installation | 1

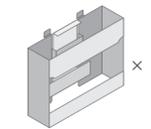
- Create an account and register your hardware at mysupport.netapp.com.
- Inventory cables and make note of the quantity.
- Confirm that your location provides 240V AC power.



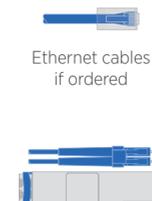
In the box



Shelf, bezel, and rackmount hardware



Shelf handles



Ethernet cables if ordered



I/O cables if ordered



SAS cables included only with the drive shelves



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



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



Hardware Universe
hww.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>



Resources

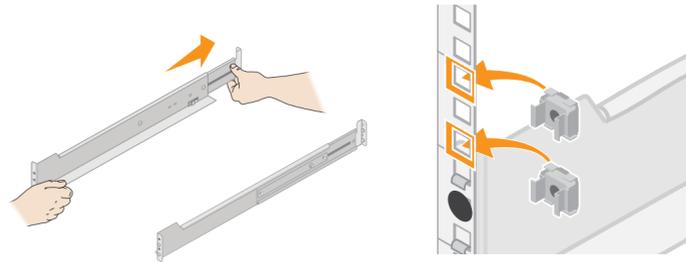
1 Unpack the Hardware

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

2 Install the Rails

See the enclosed document, *Installing SuperRail into a four-post rack* for instructions on how to install the rails.

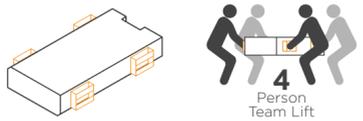
NOTE: For square hole cabinets, you must first install the provided cage nuts to secure the front and rear of the shelf with screws.



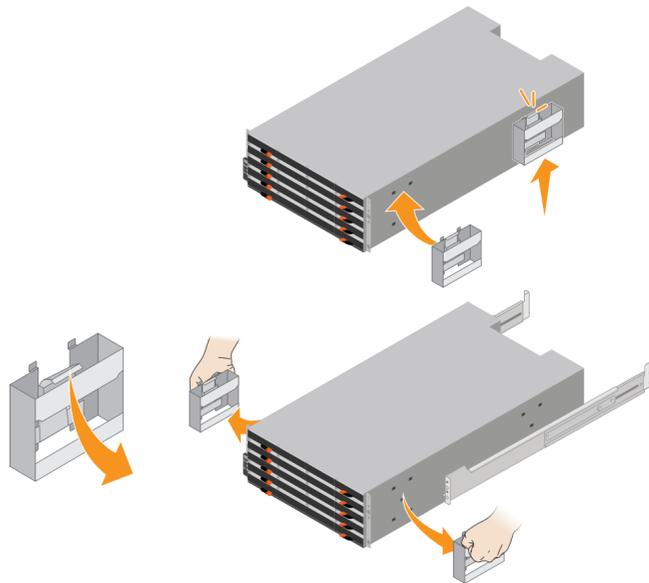
3 Install the Shelf

- 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.



- 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.



4 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.



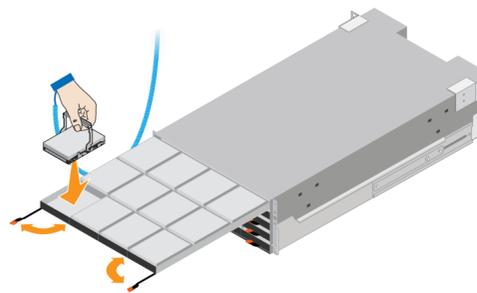
5 Install the Drives

- 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

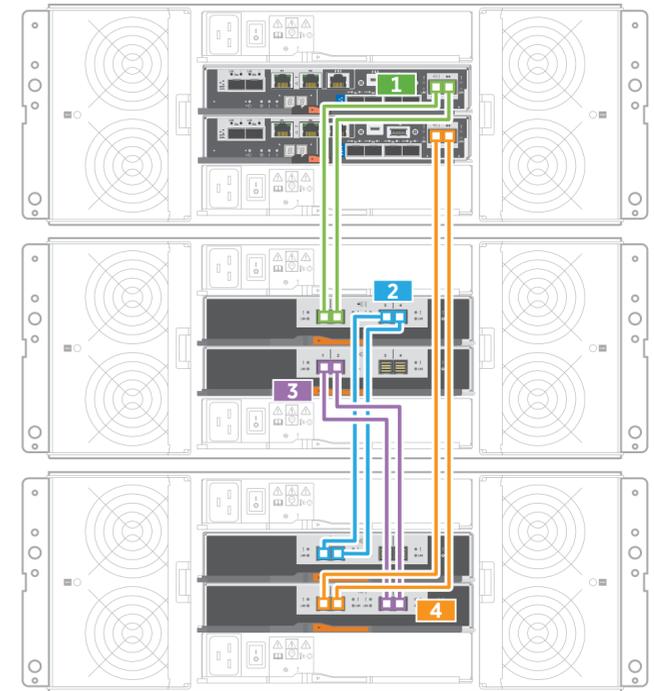
A
Example



- 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



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.

