

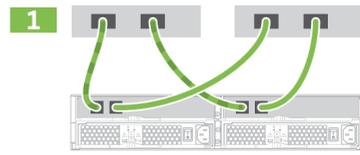
Cable the Data Hosts

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.

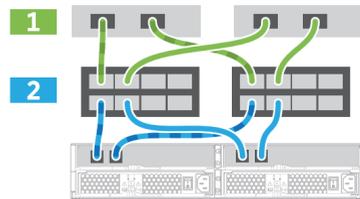
A Option Direct-attach topology

- 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.



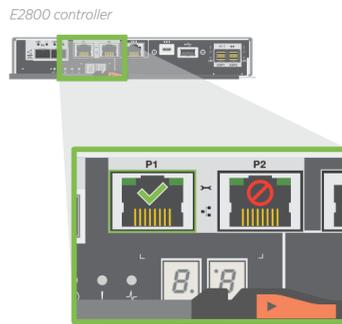
Connect and Configure the Management Connection

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.

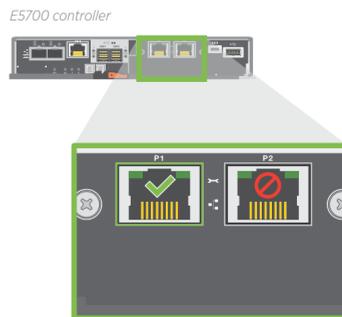
NOTE: Do not use P2 port. This port is reserved for NetApp technical support.

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 E5724, EF570, EF280, E2812, E2824, DE212C, and DE224C shelves

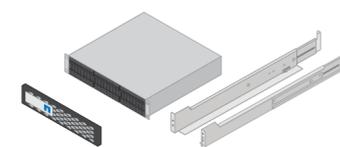
Installation and Setup Instructions

Prepare for Installation | 1

- Create an account and register your hardware at mysupport.netapp.com.
- Inventory cables and make note of the quantity.



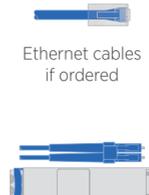
In the box



Shelf with drives installed, bezel, and rackmount hardware



Shelf endcaps



Ethernet cables if ordered



I/O cables if ordered



SAS cables included only with the drive shelves



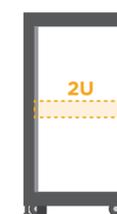
Power cables two for each shelf



You provide



Phillips #2 screwdriver, flashlight, and ESD strap



2U rack space

A standard 19 in. (48.30 cm) rack to fit 2U shelves of the following dimensions:

Shelf: 12-drive
Height: 3.41 in. (8.68 cm)
Width: 17.6 in. (44.7 cm)
Depth: 21.1 in. (53.6 cm)
Max Weight: 63.9 lb (29.0 kg)

Shelf: 24-drive
Height: 3.34 in. (8.48 cm)
Width: 17.6 in. (44.7 cm)
Depth: 19.0 in. (48.3 cm)
Max Weight: 60.5 lb (27.4 kg)



A supported browser for the management software



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>



Resources

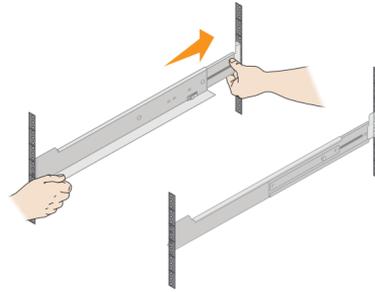
1 Unpack the Hardware

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

2 Install the Rails

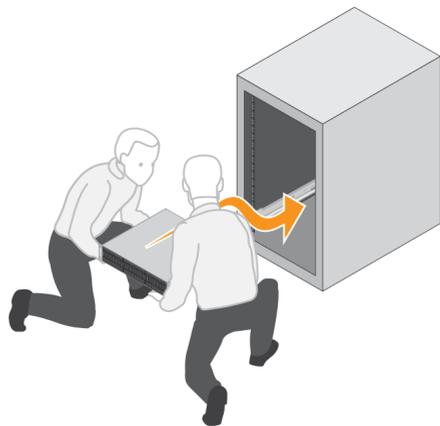
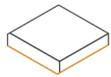
If included with your rack-mounting hardware, refer to the enclosed instructions for detailed information on how to install the rails. Rail instructions are also available through the E-Series Documentation Center at docs.netapp.com/ess-11/index.jsp under Hardware installation and upgrade >> Installing rack-mounting hardware.

NOTE: Install hardware from the bottom of the rack or cabinet up to the top to prevent the equipment from toppling over.



3 Install the Shelf

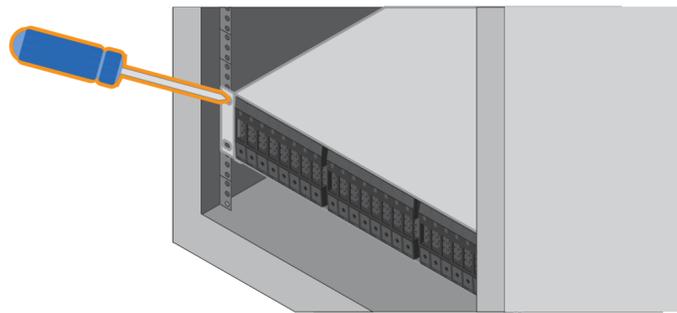
CAUTION: When fully loaded with drives, each shelf weighs approximately 64 lb (29 kg). Two persons or mechanical lift are required to safely move the shelf.



- Starting with the shelf you want at the bottom of the cabinet, place the back of the shelf (the end with the connectors) on the rails.
- Supporting the shelf from the bottom, slide it into the cabinet.

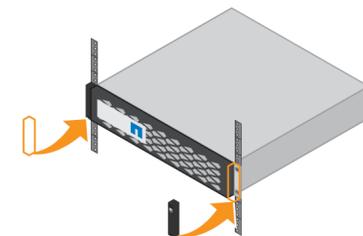
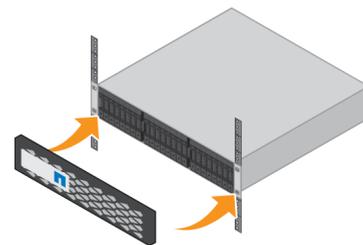
4 Secure the Shelf

Secure the shelf to the rack as directed in the instructions for the rack-mounting hardware.



5 Install the Bezel or End Caps

- Position the front bezel in front of the controller shelf so that the holes at each end align with the fasteners on the controller shelf.
- Snap the bezel into place.
- If you have optional drive shelves, position the left end cap in front of the drive shelf so that the holes in the end cap align with the fasteners on the left side of the shelf.
- Snap the end cap into place.
- Repeat the above steps for the right end cap.



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 three drive shelves

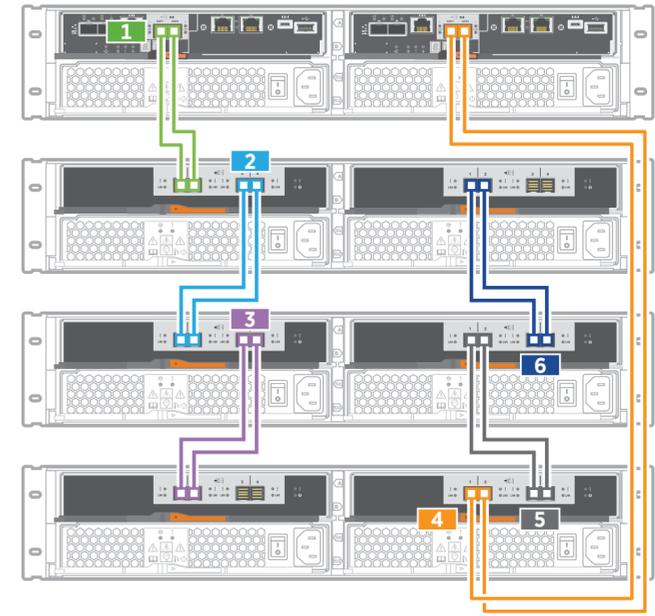
A
Example



• Storage cables

- Cable controller A to IOM A of the first drive shelf.
- Cable IOM A of the first drive shelf to IOM A of the second drive shelf.
- Cable IOM A of the second drive shelf to IOM A of the third drive shelf.
- Cable controller B to IOM B of the third drive shelf.
- Cable IOM B of the second drive shelf to IOM B of the third drive shelf.
- Cable IOM B of the first drive shelf to IOM B of the second drive shelf.

Example A: An E5700 controller shelf with three DE212C/DE224 disk shelves in a standard SAS configuration.



Cable a controller shelf and one drive shelf

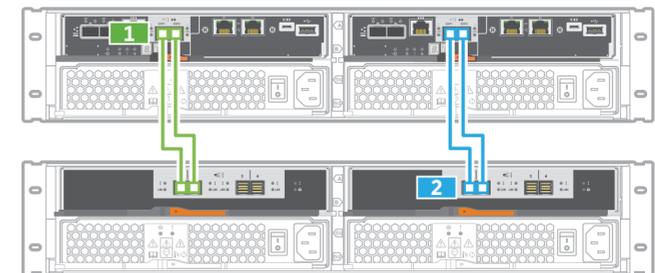
B
Example



• Storage cables

- Cable controller A to IOM A.
- Cable controller B to IOM B.

Example B: An E5700 controller shelf with one DE212C/DE224 disk shelf in a standard SAS configuration.



Power the Drive Shelves



- CAUTION:** Confirm the drive shelf power switches are off.
- Connect the two power cables for each shelf to different power distribution units (PDUs) in the cabinet or rack.
 - If you have drive shelves, turn on their two power switches first. Wait 2 minutes before applying power to the controller shelf.
 - Turn on the two power switches on the controller shelf.
 - 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.

