

AFF A700s Systems

Installation and Setup Instructions

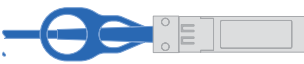
Prepare for installation | Stage 1

Pre-setup


- Unpack all boxes and inventory contents. For more cable information and part numbers, see the [Hardware Universe](#).
- If you are not already in the AFF and FAS System Documentation Center, go to [AFF and FAS System Documentation Center](#); click AFF A700s systems; click Installation and Setup:
 - Review the [NetApp ONTAP Configuration Guide](#).
 - Watch the videos listed under [Setup videos](#).

In the box

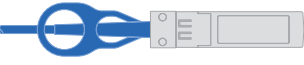
Data and cluster interconnect cables




40GbE cluster interconnect cable
Part number 112-00542



Copper breakout cable
Part number 112-00602 or 112-00603




40GbE data network cable
Part number 112-00604 or 112-00605




Optical breakout cable
Part number 112-00260, or 112-00261

Storage cables




MiniSAS HD cable
Part number 112-00436, 112-00437, or 112-00438

Controller-to-controller cables




0.5m miniSAS-HD cable
Part number 112-00435




USB console cable
Part number 112-00508


Additional cables and optional rail kit



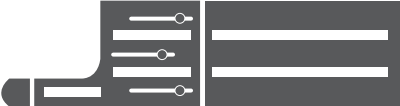
Ethernet cables



Power cables

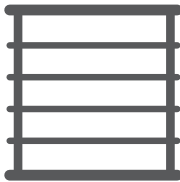


FC fabric cable
Part number 112-00342, 112-00344, 112-00346, or 112-00347



Rail kit - optional

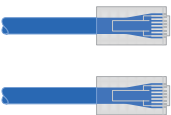
You provide



Rack space
4U per chassis



Screwdriver



Additional network cables
For connecting your storage to your network switch and Microsoft® Windows® client

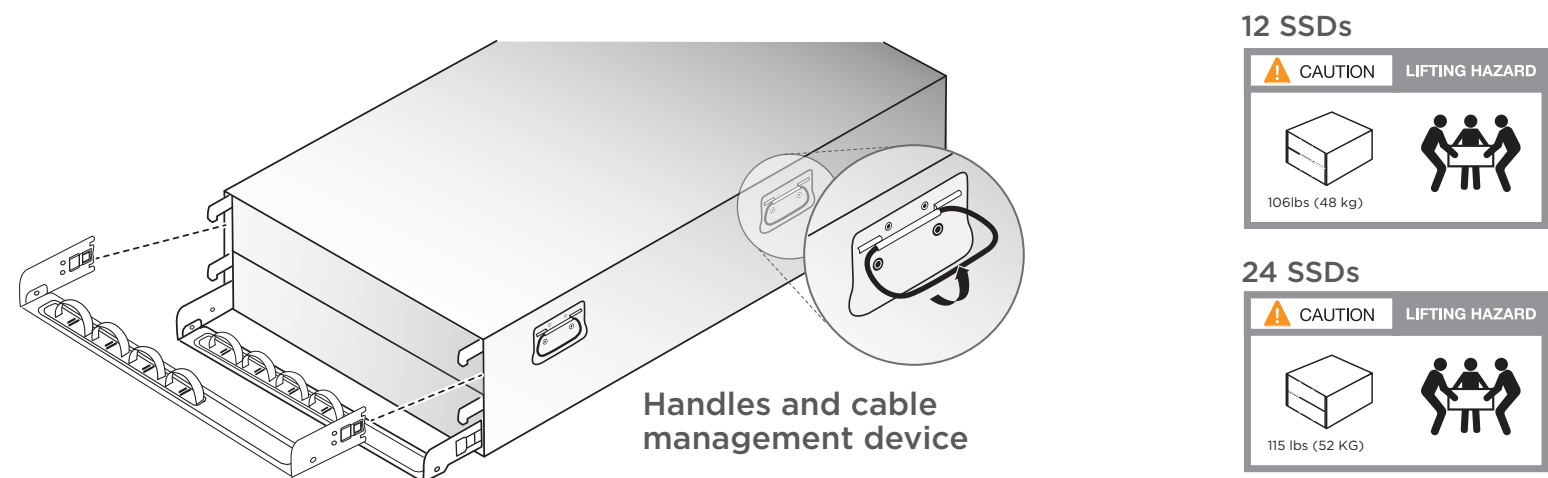


Client
Client with a USB/serial connection and access to a Web browser to configure your storage system

Install hardware | Stage 2

1 Unpack and install the system.

- 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 (as shown).
- Place the bezel on the front of the system.



2 Cable controller to switches (Choose the option below that matches your order)

See your network administrator for help connecting to your switch.

0.5m miniSAS-HD cable
(PN 112-00435)

- 1 Cable NVRAM10-P ports together; port a to port a and port b to port b.

40GbE cluster interconnect cable
(PN 112-00542)

- 2 **OPTION A:** Cable the cluster interconnect; ports e0a to e0a and ports e0f to e0f.

OPTION B: Cable the e0a and e0e ports to the cluster interconnect switches.

10GbE breakout cable
(Copper PN 112-00545, 112-00546)
(Optical PN 112-00260, 112-00261, QSFP module PN 332-00389)

OPTION C: Cable ports e0a and e0f, and then cable 2 cable heads from each cable to the cluster interconnect switches.

Ethernet cable

- 3 Cable the e0M port and BMC ports to the management switches.

40GbE data network cable
(PN 112-00604, 112-00605)

- 4 **OPTION A:** Cable the e0e, e0j, e4a and e4e ports to the 40GbE data network switches.

10GbE breakout cable
(Copper PN 112-00602, 112-00603)
(Optical PN 112-00260, 112-00261, QSFP module PN 332-00389)

OPTION B: Cable the 10GbE data network using 10GbE breakout cable, to e0f (10GbE: e0f, e0g, e0h, e0i) and e4a (10GbE: e4a, e4b, e4c, e4d) ports.

OPTION C: Cable port e4a (10GbE: e4a, e4b, e4c, e4d) to the 10GbE data switches, and then cable the two remaining cable heads from e0a (10GbE: e0c, e0d) and e0f (10GbE: e0h, e0i) to the 10GbE data switches

FC fabric cable
(PN 112-00342, 112-00344, 112-00346, 112-00347)

- 5 **FOR SYSTEMS WITH FC CARDS:** Cable 2a, 2b, 3a, and 3b to the FC fabric switches.
Note: If your system is configured with 4-port 16Gb FC cards, cable 2a-d and 3a-d to the FC fabric switches.

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

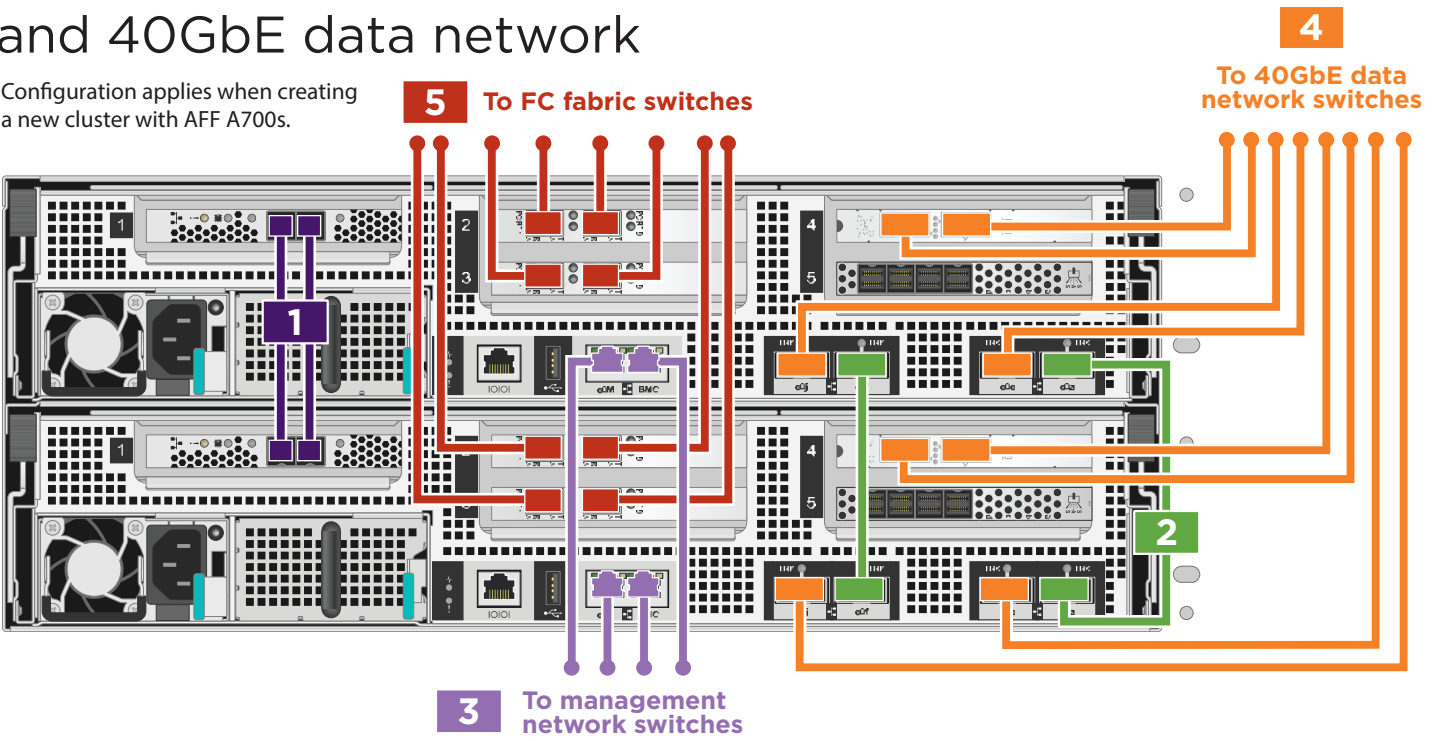
Power cable

- 7 Connect power cables to the power supplies, but not to the power source. (not shown).

DO NOT plug power cords into the power source at this point.

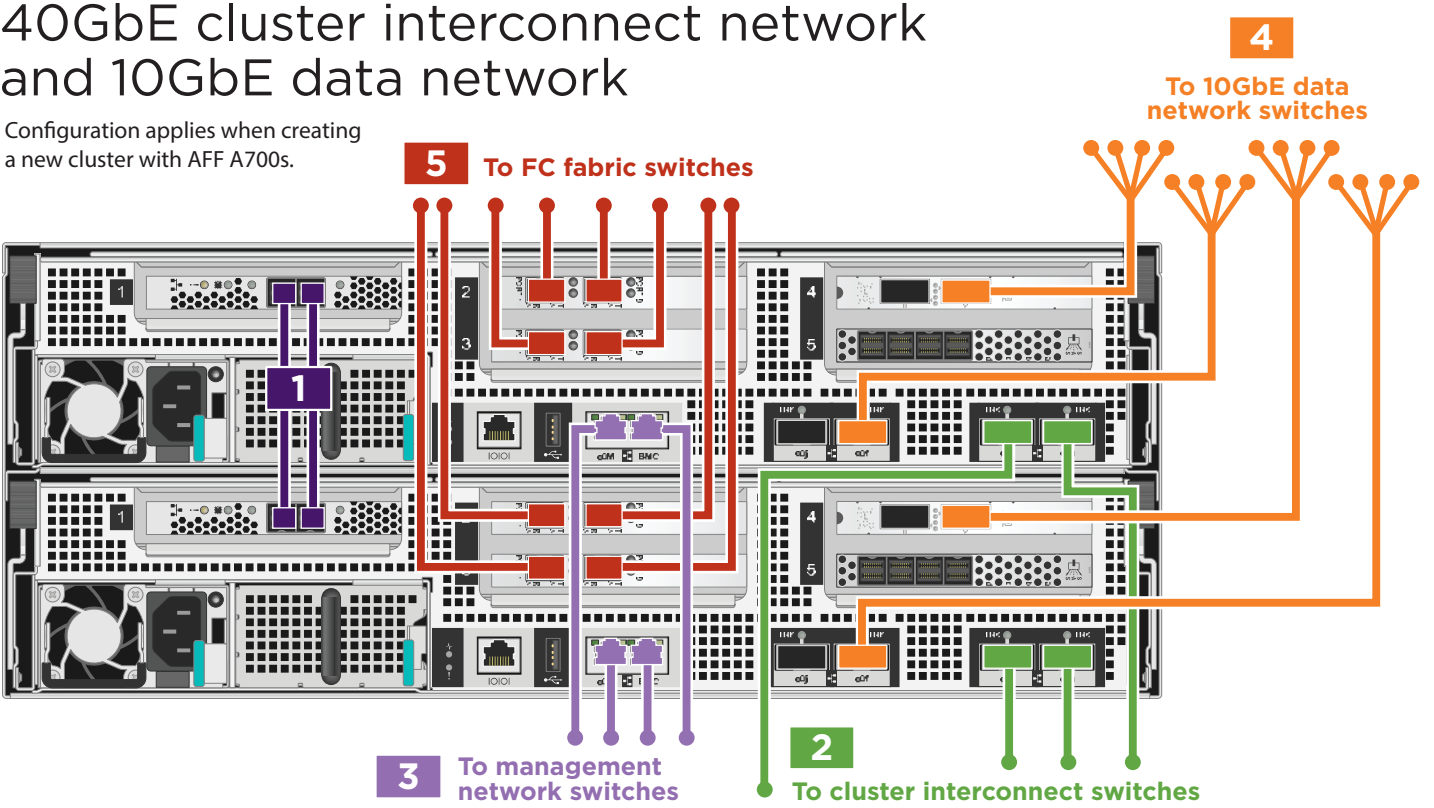
A 40GbE two-node switchless cluster and 40GbE data network

Configuration applies when creating a new cluster with AFF A700s.



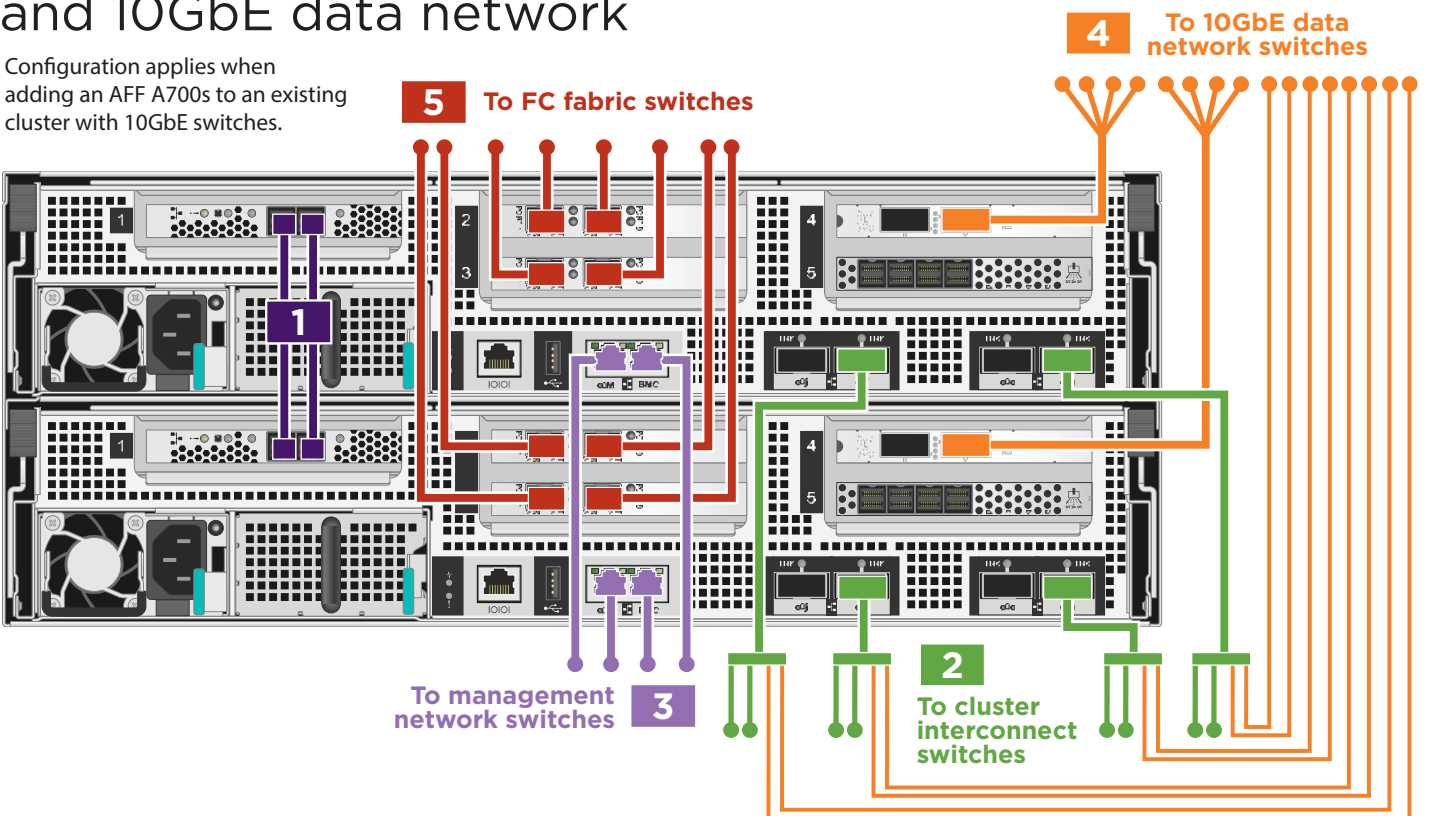
B 40GbE cluster interconnect network and 10GbE data network

Configuration applies when creating a new cluster with AFF A700s.





C 10GbE cluster interconnect network and 10GbE data network

Configuration applies when adding an AFF A700s to an existing cluster with 10GbE switches.



 If you have no external storage, go to page 4. 

Cable external storage

-  MiniSAS HD cable
(PN 112-00436, 112-00437, or 112-00438)
- 1

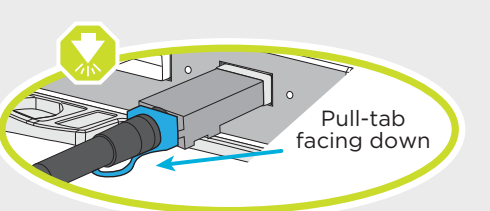
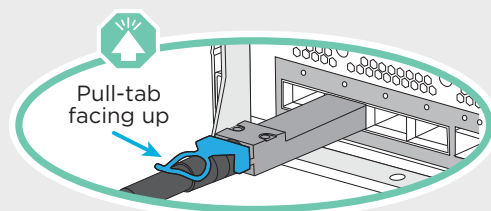
Connect the shelf-to-shelf ports
- 2

Connect the controllers to Stack 1
- 3

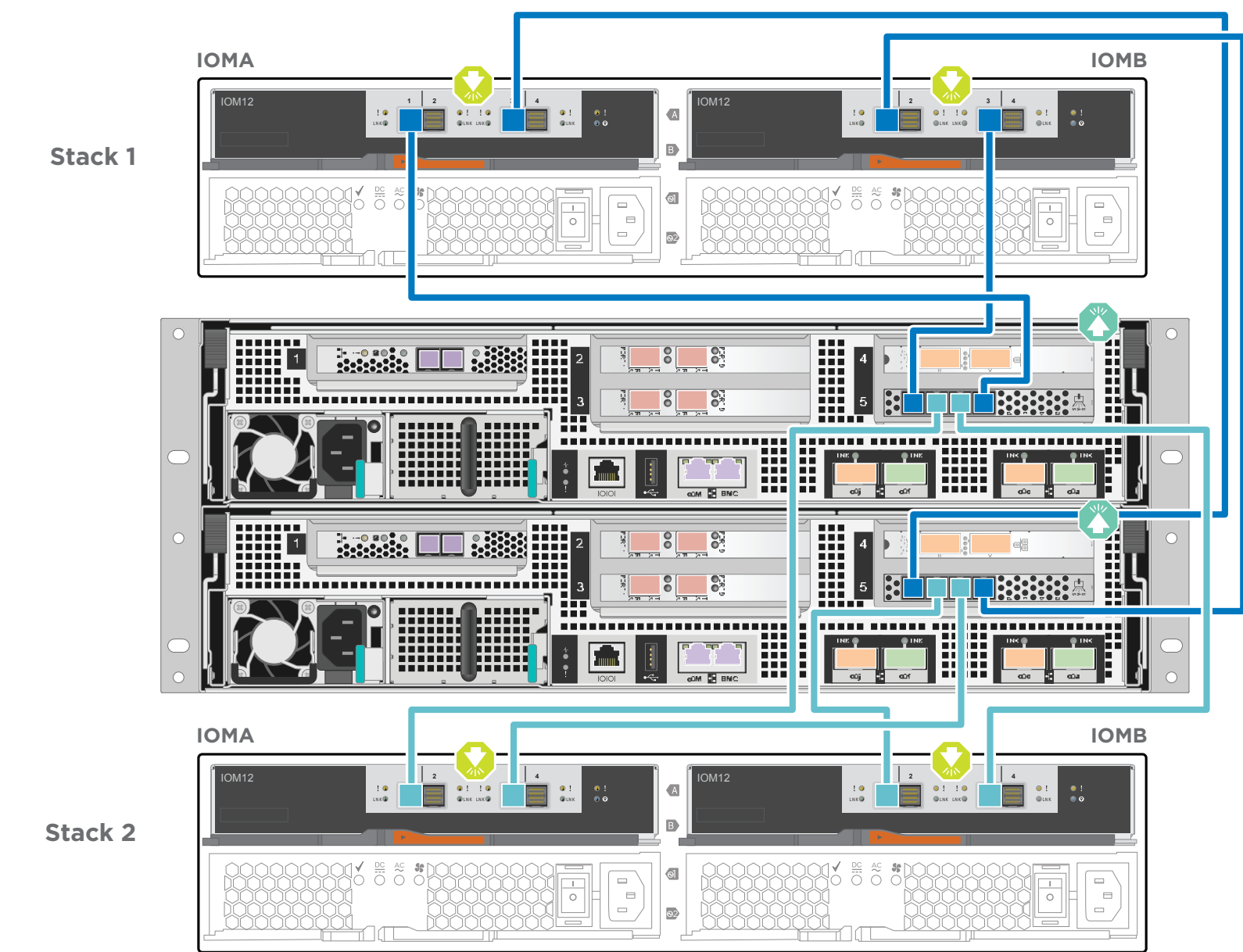
Connect the controllers to Stack 2

Orient the cable connector pull-tab in the correct direction, then gently push the connector into place until it clicks.

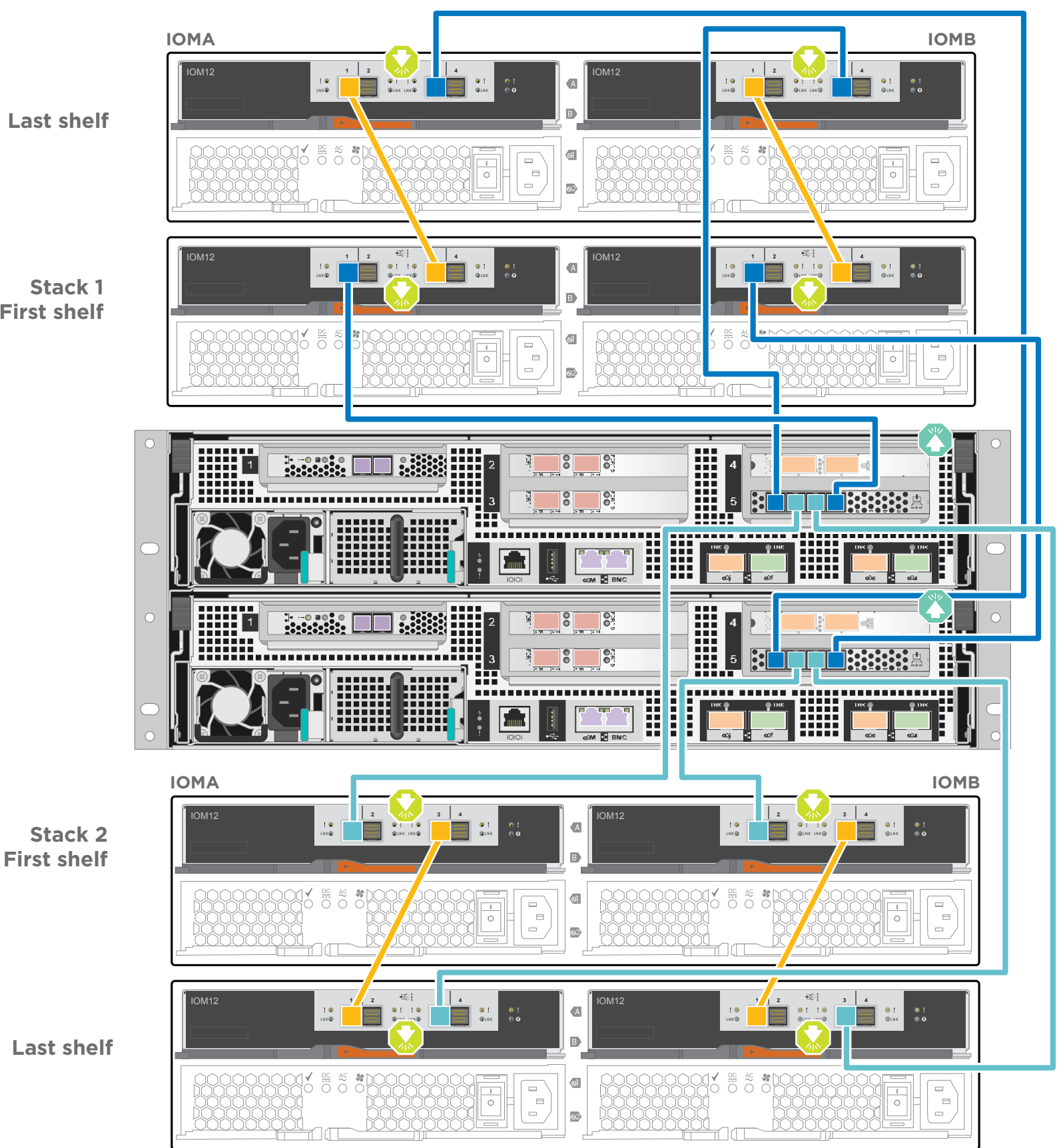
Note: To unplug a cable, gently pull the tab to release the locking mechanism.



Two drive shelf stacks of one drive shelf per stack



Two drive shelf stacks of two drive shelves per stack



A | IF YOUR LAPTOP SUPPORTS NETWORK DISCOVERY

① If your system has one or more external drive shelves, set the shelf IDs:

1. Connect the shelves to different power sources, power on the drive shelf, and then remove the end cap on the left of the shelf.
2. Press and hold the shelf ID button until the first digit blinks, and then press the button to advance the first digit (0-9) to the desired number. The first digit continues to blink.
3. Press and hold the button until the second digit blinks, and then press the button to advance the second digit (0-9) to the desired number. The first digit stops blinking, and the second digit continues to blink.
4. Press and hold the button until the second digit stops blinking, and then replace the end cap on the shelf.
5. Wait about 10 seconds for both digits to start blinking again and for the LED to illuminate, and then power-cycle the drive shelf to make the shelf ID take effect.
6. Repeat these steps for any remaining drive shelves.

② Power on the controllers

Connect and secure the power cables:

- Connect the shelves to different power sources.
- Connect the controllers to different power sources.

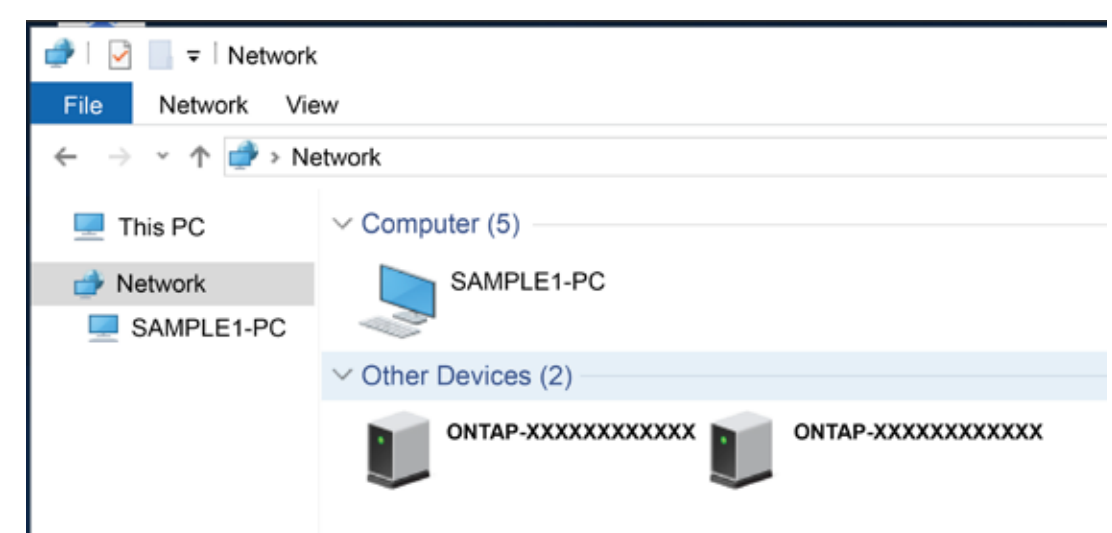
Note: The system begins to boot as soon as the power supplies are connected to the power sources. **Booting may take up to 8 minutes.**

③ Complete initial cluster setup:

1. **Make sure that your laptop has network discovery enabled*.**
See your laptop's help for network discovery settings.
2. Connect your laptop to the Management switch.
3. Access the network computers and devices:
 - Open File Explorer
 - Click network in the left pane
 - Right click and select refresh.
4. Double-click either ONTAP icon

Note: Accept any certificates displayed on your screen.

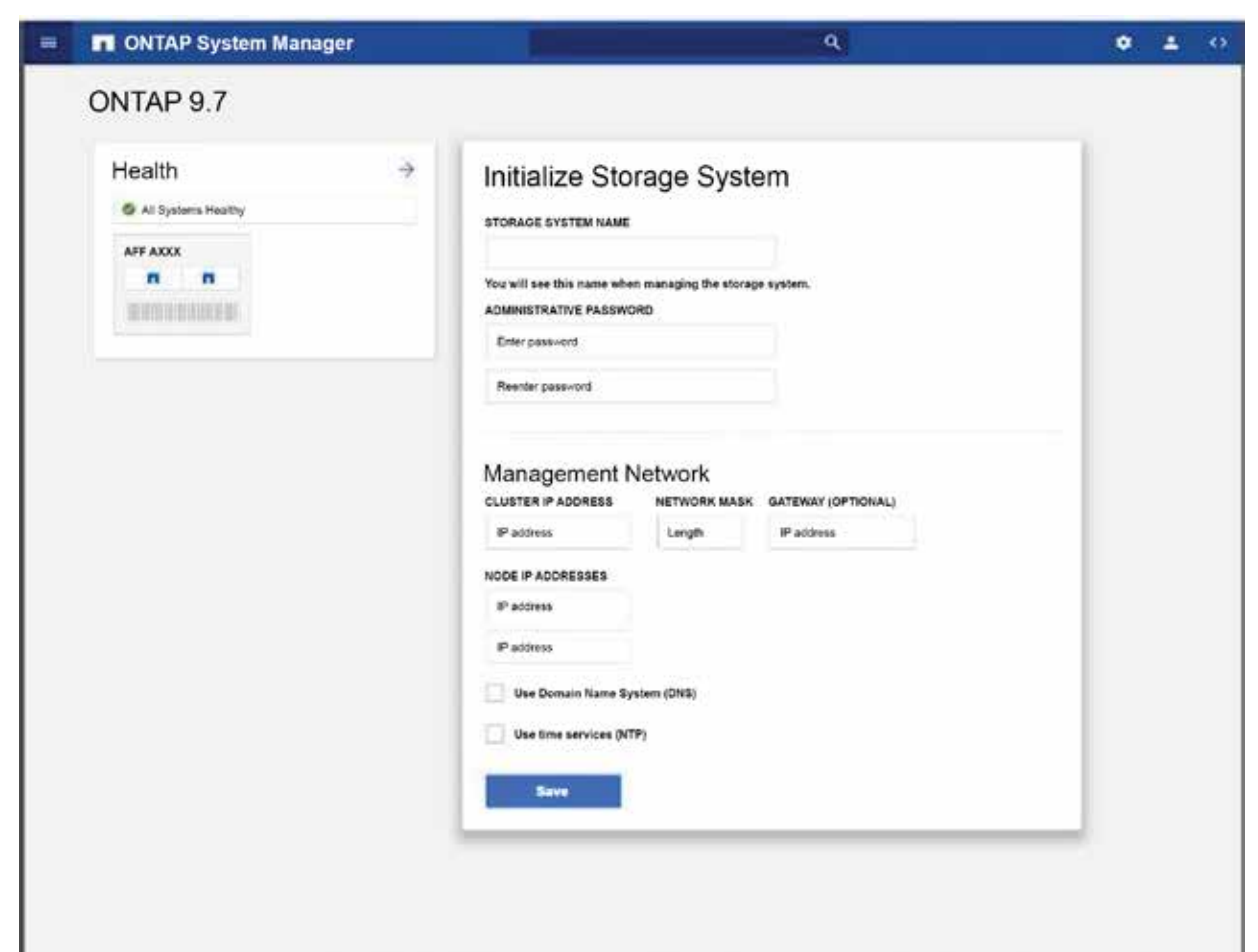
***If your laptop does not support network discovery, see the Installation and setup guide for your model for how to complete initial cluster setup.**



④ Use System Manager Guided Setup to configure your cluster

⑤ Completing setup

1. Click...
 - a) mysupport.netapp.com
 - b) [Create/log in to your account](#)
 - c) [Download and install Active IQ Config Advisor](#) (used at the end)
 - d) [Register your system](#)
2. Verify the health of your system by running Config Advisor.
3. After you have completed the initial configuration, go to the [NetApp ONTAP Resources](#) page for information about configuring additional features in ONTAP.



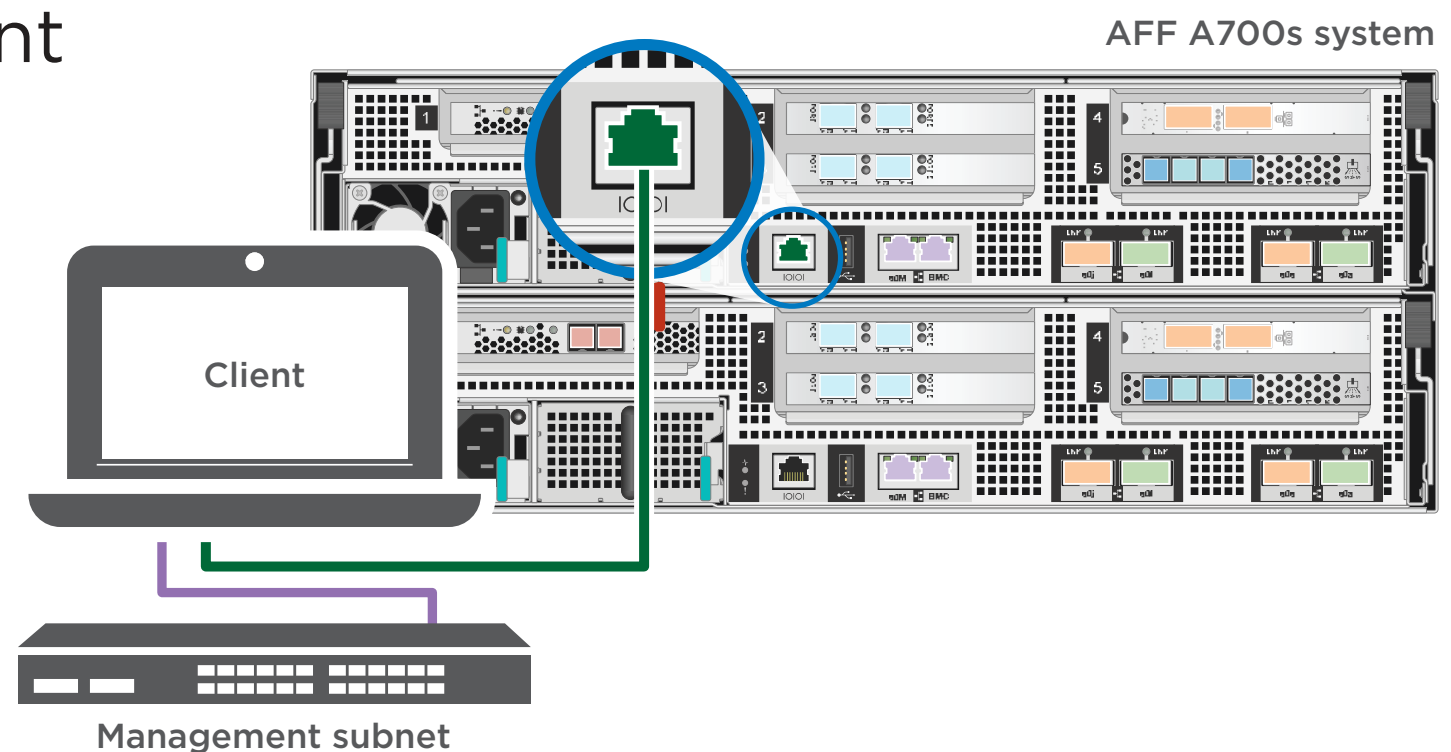
Complete system setup and configuration | Stage 4

B IF YOUR LAPTOP DOES NOT SUPPORT NETWORK DISCOVERY

1 Cable and configure your client

 Ethernet cables

- 1 Connect the console cable to the client and the console port on the controller module.
- 2 Connect the client to the switch on the management subnet:
 - a. Give the client a TCP/IP address on the management subnet.
 - b. Set the console port on the client to 115,200 baud with N-8-1.



2 If your system has one or more drive shelves, set the shelf IDs:

1. Power on the drive shelf, and then remove the end cap on the left of the shelf.
2. Press and hold the orange button until the first digit blinks, and then press the button to advance the first digit (0-9) to the desired number. The first digit continues to blink.
3. Press and hold the button until the second digit blinks, and then press the button to advance the second digit (0-9) to the desired number. The first digit stops blinking, and the second digit continues to blink.
4. Press and hold the button until the second digit stops blinking, and then replace the end cap on the shelf.
5. Wait about 10 seconds for both digits to start blinking again and for the LED to illuminate, and then power-cycle the drive shelf to make the shelf ID take effect.
6. Repeat these steps for any remaining drive shelves.

3 Connect the power cables to the controllers and to the power source

The system powers on when plugged into the power source.

4 Configure your system

SAN or NAS
optimized system:

Log into System Manager, as described on the back of your system, and then complete the storage provisioning wizards found under Applications in System Manager.

All other systems:

1. 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,
 - a. Open a console session using PuTTY, a terminal server, or the equivalent for your environment.
 - b. Enter the node management IP address when prompted.
2. Use System Manager Guided Setup to configure your cluster.
 - a. Point your browser to the address you assigned in step 1: <https://x.x.x.x>.
 - b. Enter the data from your Cluster Configuration Worksheet.

5 Completing setup

1. Click...
 - a) mysupport.netapp.com
 - b) [Create/log in to your account](#)
 - c) [Download and install Active IQ Config Advisor](#) (used at the end)
 - d) [Register your system](#)
2. Verify the health of your system by running Config Advisor.
3. After you have completed the initial configuration, go to the [NetApp ONTAP Resources](#) page for information about configuring additional features in ONTAP.