

# ThinkSystem DM7100F Systems

## Installation and Setup Instructions

### Prepare for installation | Stage 1

Pre-setup

1. Unpack all boxes and inventory contents.
2. Complete the Cluster Configuration Worksheet.

In the box

100 GbE cables (QSFP28)



RJ-45 cables  
Wrench port (e0M/BMC)  
(order-dependent)



25 GbE cables (SFP28)  
HA interconnect, GbE network cables



Additional cables

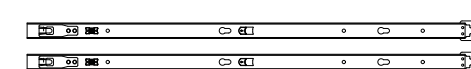


Ethernet cables      Power cables

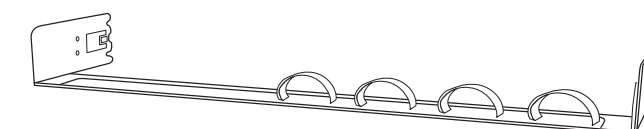


micro USB console cable

Slide rail kit



Cable management tray



32 Gb FC (SFP+ Op)  
FC optical network cables



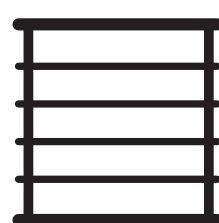
16 Gb FC or 25GbE cables  
Mezzanine cards (SFPs pre-installed)



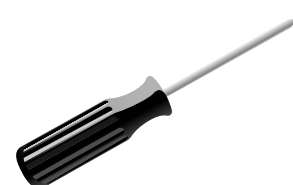
Storage Cables  
Mini-SAS HD to  
Mini-SAS HD cables



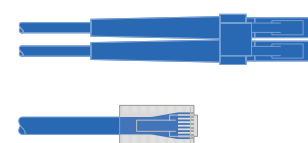
You provide



Rack space  
4U per DM7100F chassis  
+2U for each DM240N shelf



Screwdriver



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



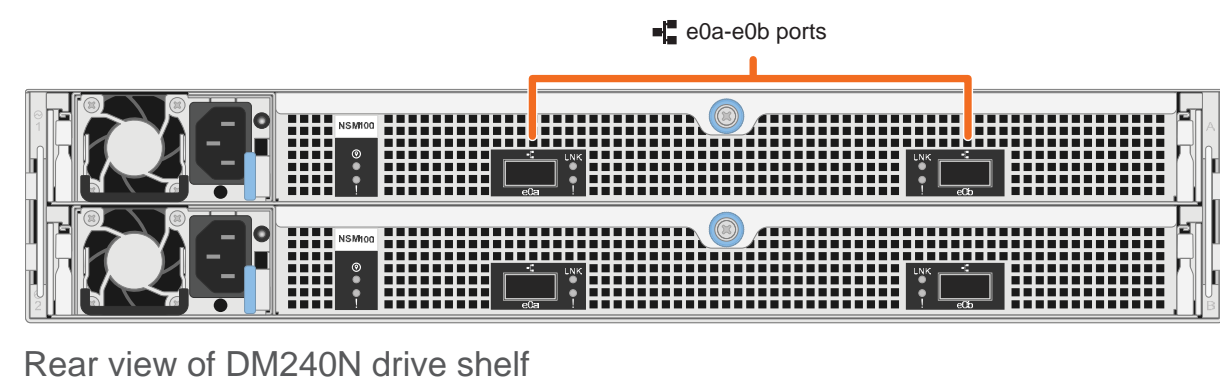
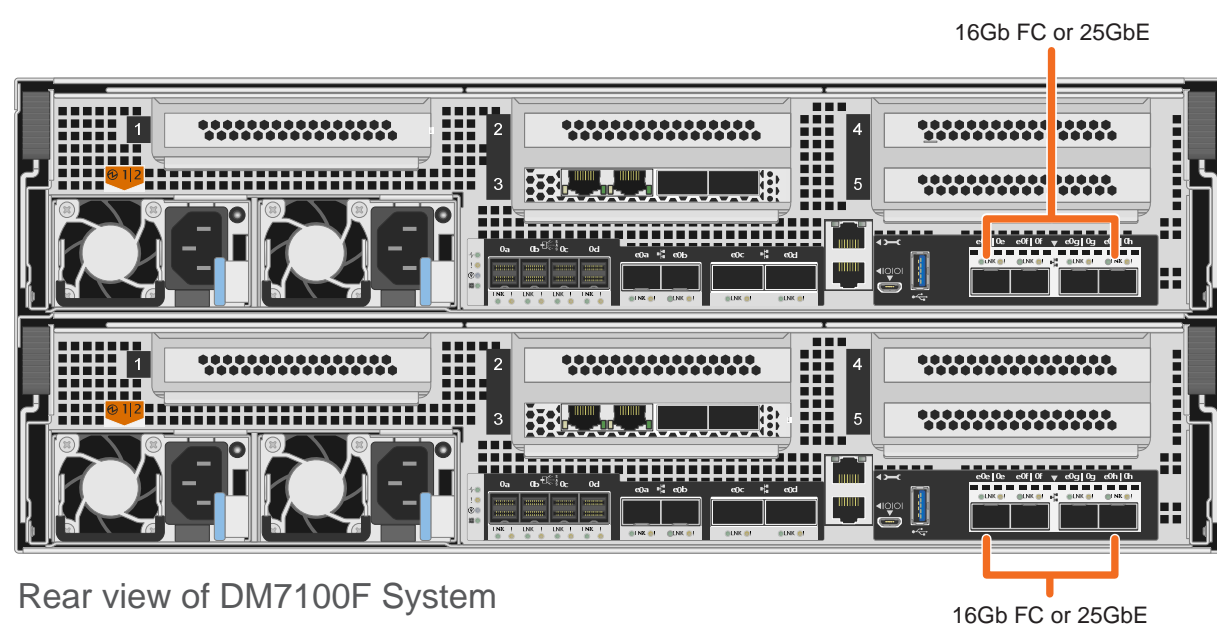
Client  
Runs the software to configure  
your storage system.

For Barcode Position Only

Printed in China  
(1P) P/N: SP47B36641

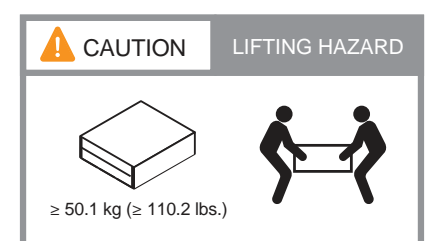
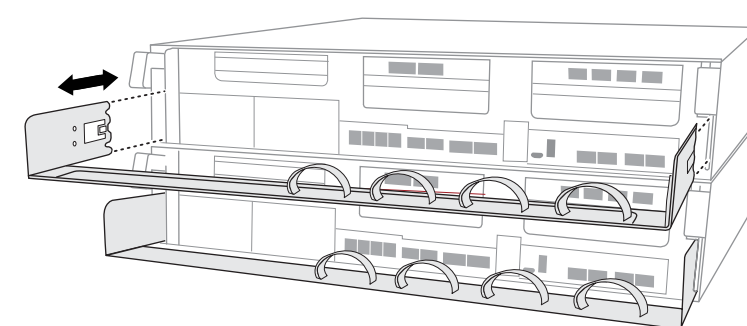


# Install hardware | Stage 2



## 1 Installing system in a rack

- Install the rail 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.
- Install any drive shelves for your system.

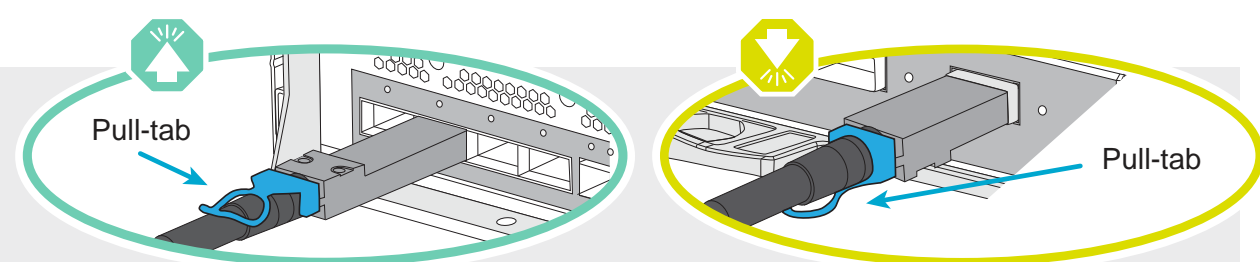


## 2 Cabling the controller for a switchless or switched cluster

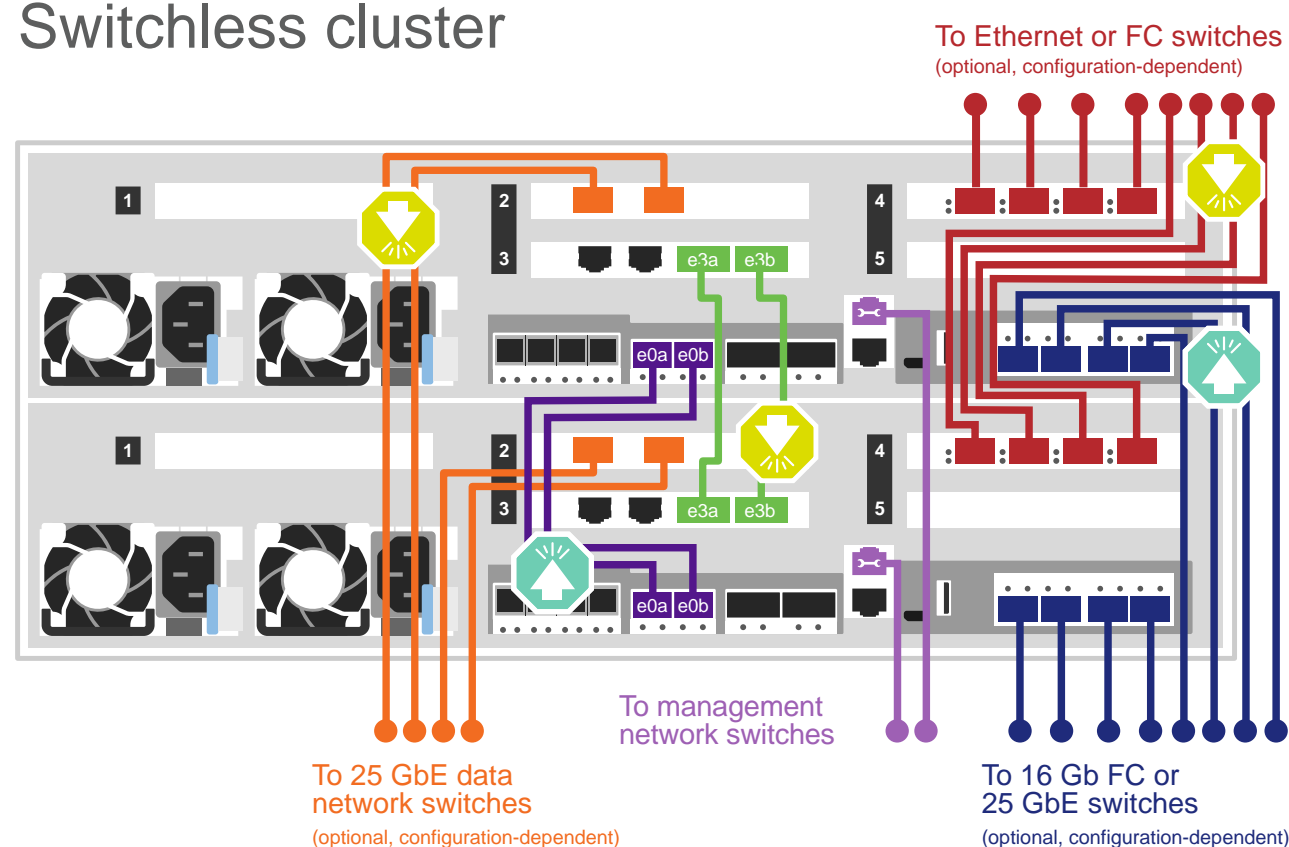
See your network administrator for help connecting to your switches.

**Attention:** Be sure to check the illustration arrow for the proper cable connector pull-tab orientation.

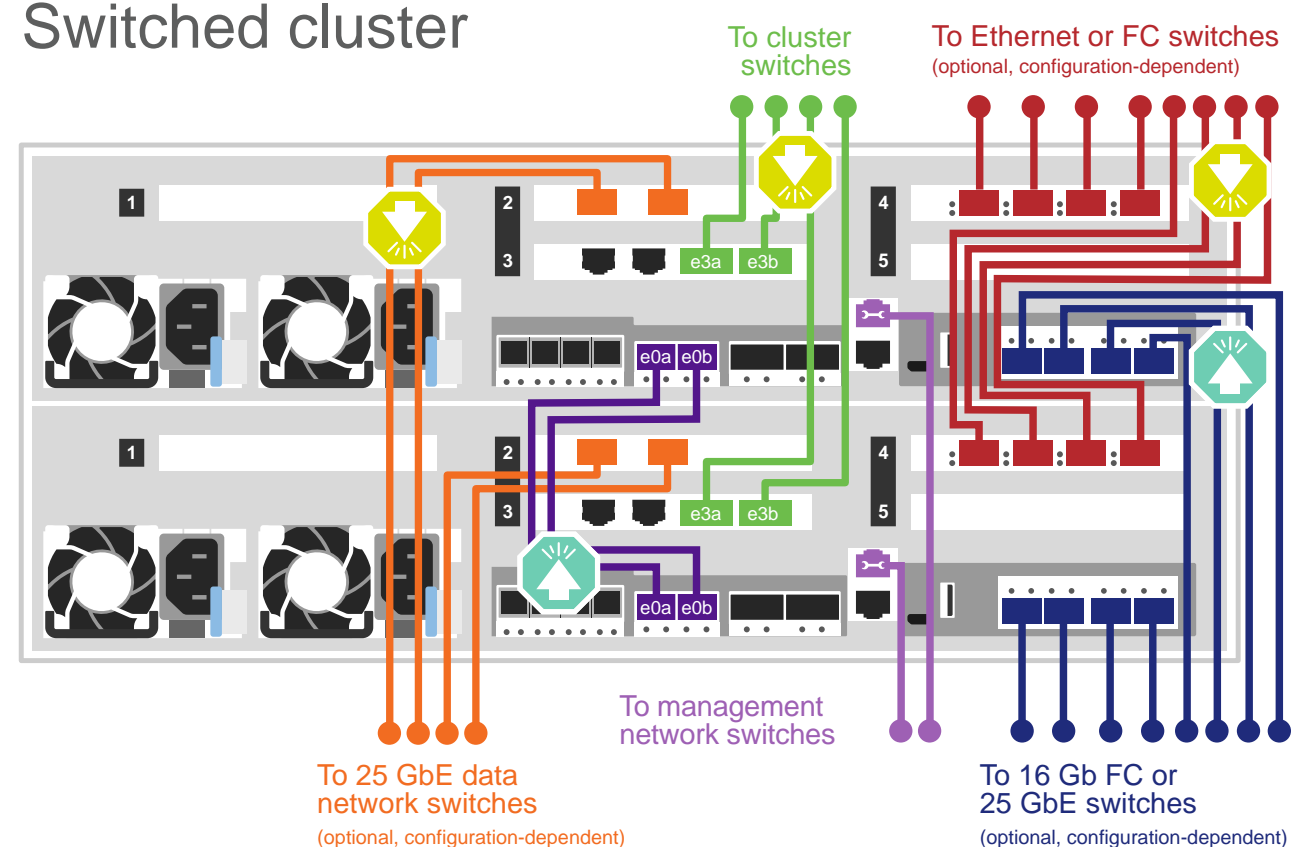
**Note:** To unplug a cable, gently pull the tab to release the locking mechanism.



### Switchless cluster



### Switched cluster



- **Switchless cluster:** Connect ports e3a to e3a and ports e3b to e3b.

**Switched cluster:** Controller 1: Connect port e3a to switch 1 and port e3b to switch 2. Controller 2: Connect port e3a to switch 1 and port e3b to switch 2.



- Connect ports e0a to e0a and ports e0b to e0b.



- Connect ports to the 25 GbE data network switches (optional, configuration dependent).



- Connect ports to the FC data network switches (optional, configuration-dependent).



- Connect the Wrench port (e0M/BMC) to the management switches.



- Connect the mezzanine cards (e0e through e0h) to either 16 Gb FC or 25 GbE switches (optional, configuration-dependent).

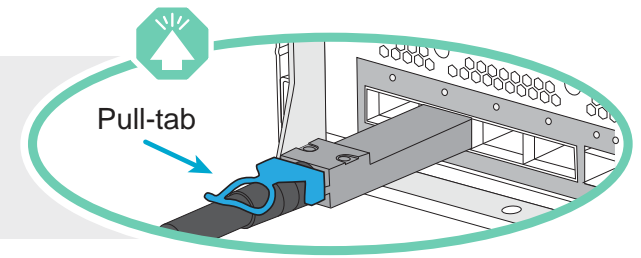
- Strap the cables to the cable management arms. (not shown)

DO NOT plug the power cables into a power source yet. The system will boot as soon as the power cables are plugged into the power source and power supplies.



# Cable storage | Stage 3

**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.

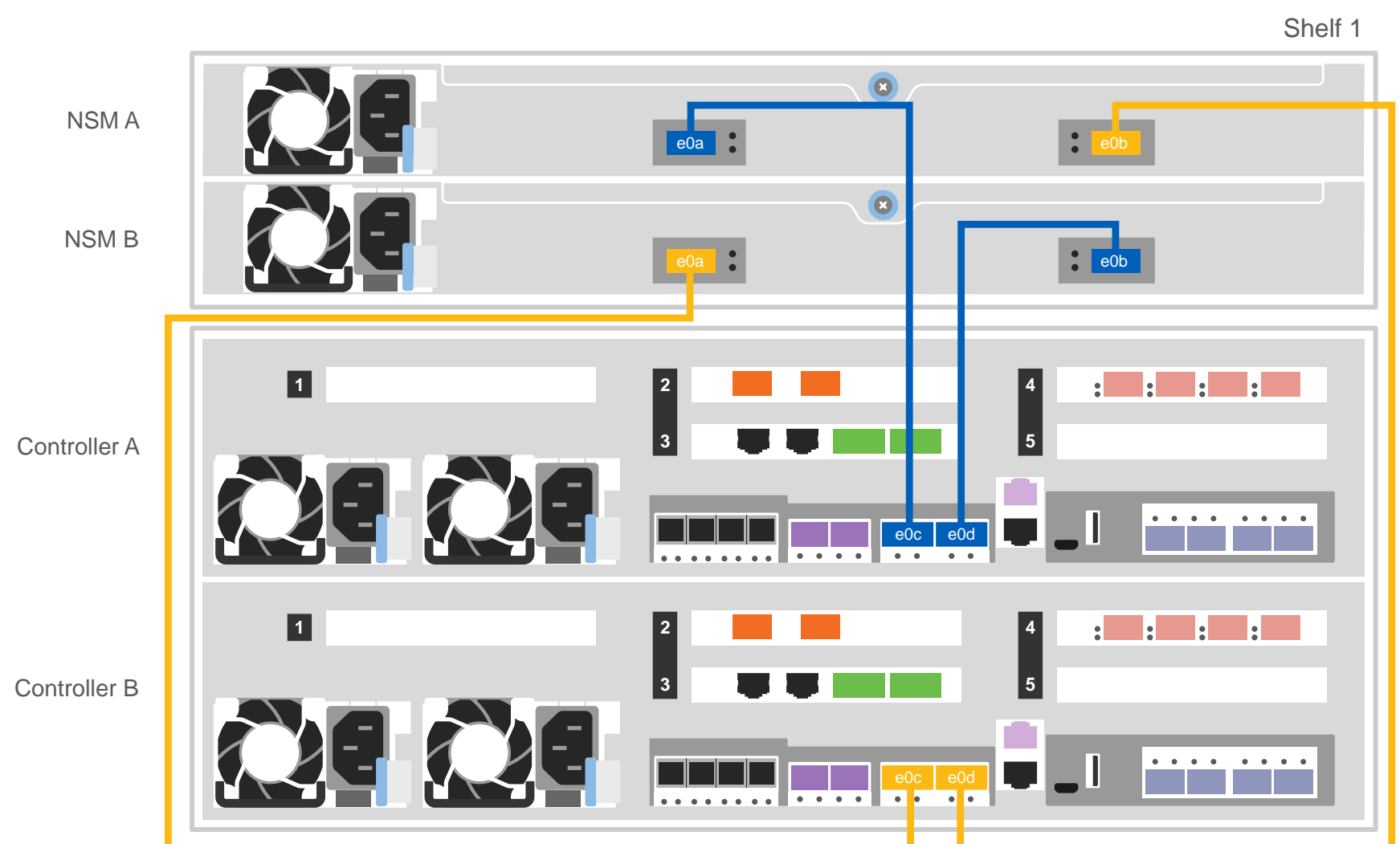


## Cabling a DM7100F system to one DM240N shelf



100 GbE QSFP28 copper cable

- Connect controller A port e0c to port e0a on NSM A on the shelf.  
Connect controller A port e0d to port e0b on NSM B on the shelf.
- Connect controller B port e0c to port e0a on NSM B on the shelf.  
Connect controller B port e0d to port e0b on NSM A on the shelf.

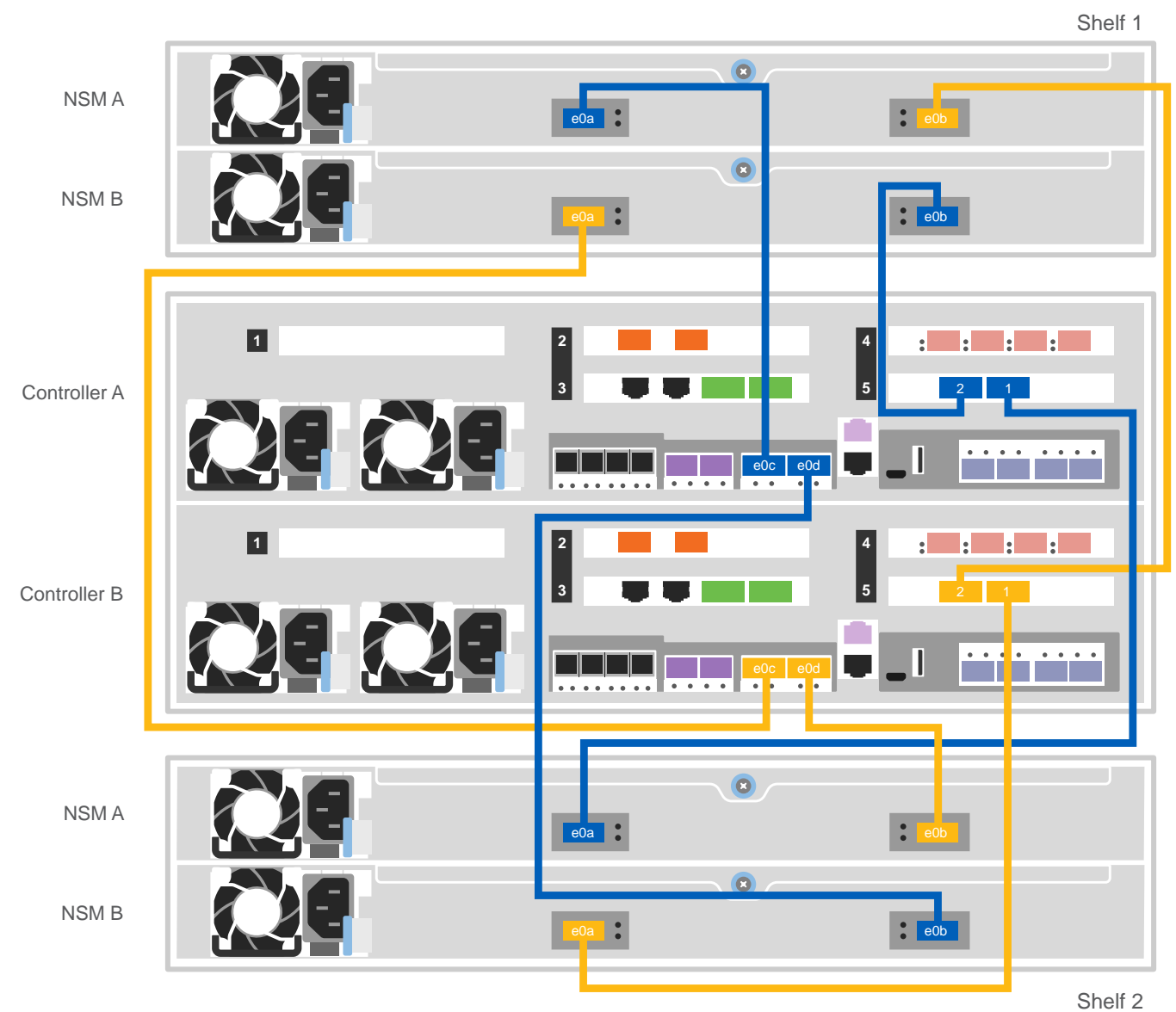
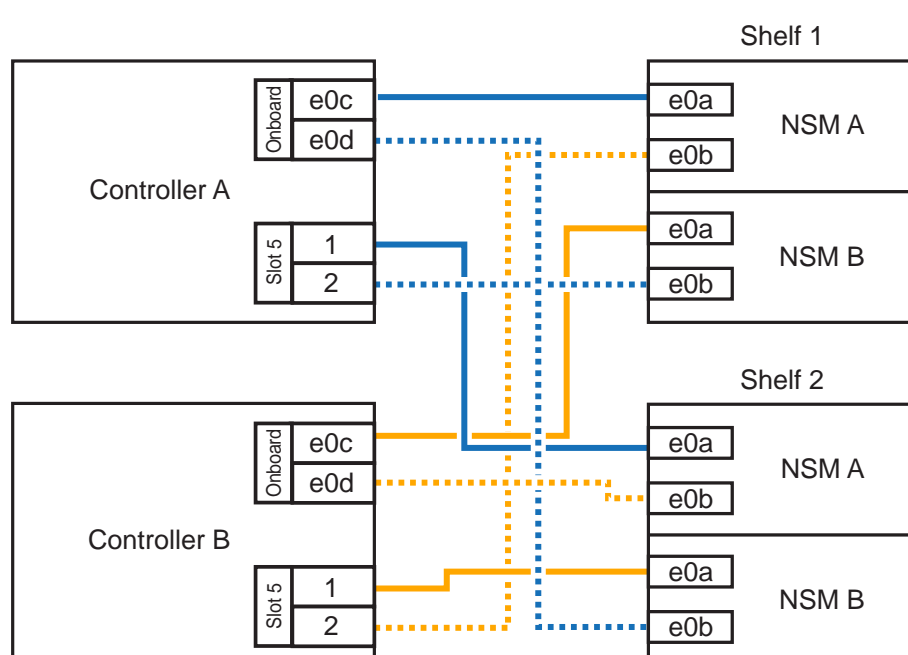


## Cabling a DM7100F system to two DM240N shelves



100 GbE QSFP28 copper cable

Use the table below to connect your controllers to the two DM240N shelves.

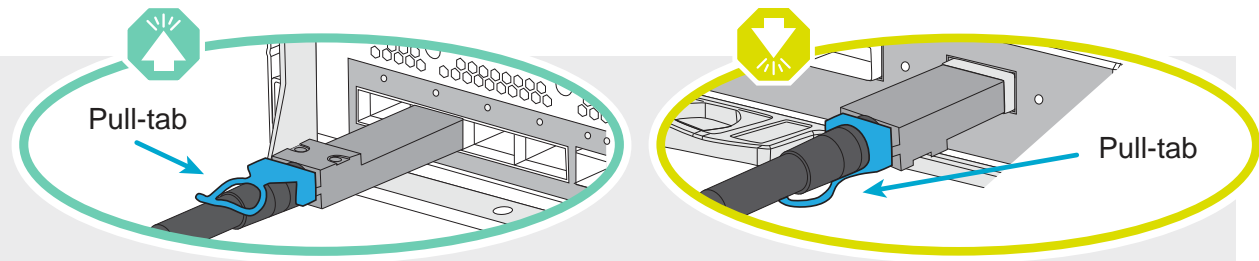


**Note:** Prior to connecting the Nodes to the IOMs in the stack, verify that the Tied Controller System ID matches your DM controller Serial Number using the label on the top of the expansion shelf. Refer to the label graphics on the right.

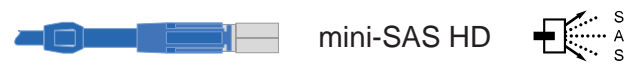
Tied Controller System  
 连接控制器系统  
 DM MT-M: 7YXX-CT01WW  
 DM SN: XXXXXXXX  
 Stack #: 1

# Cable storage | Stage 3 cont.

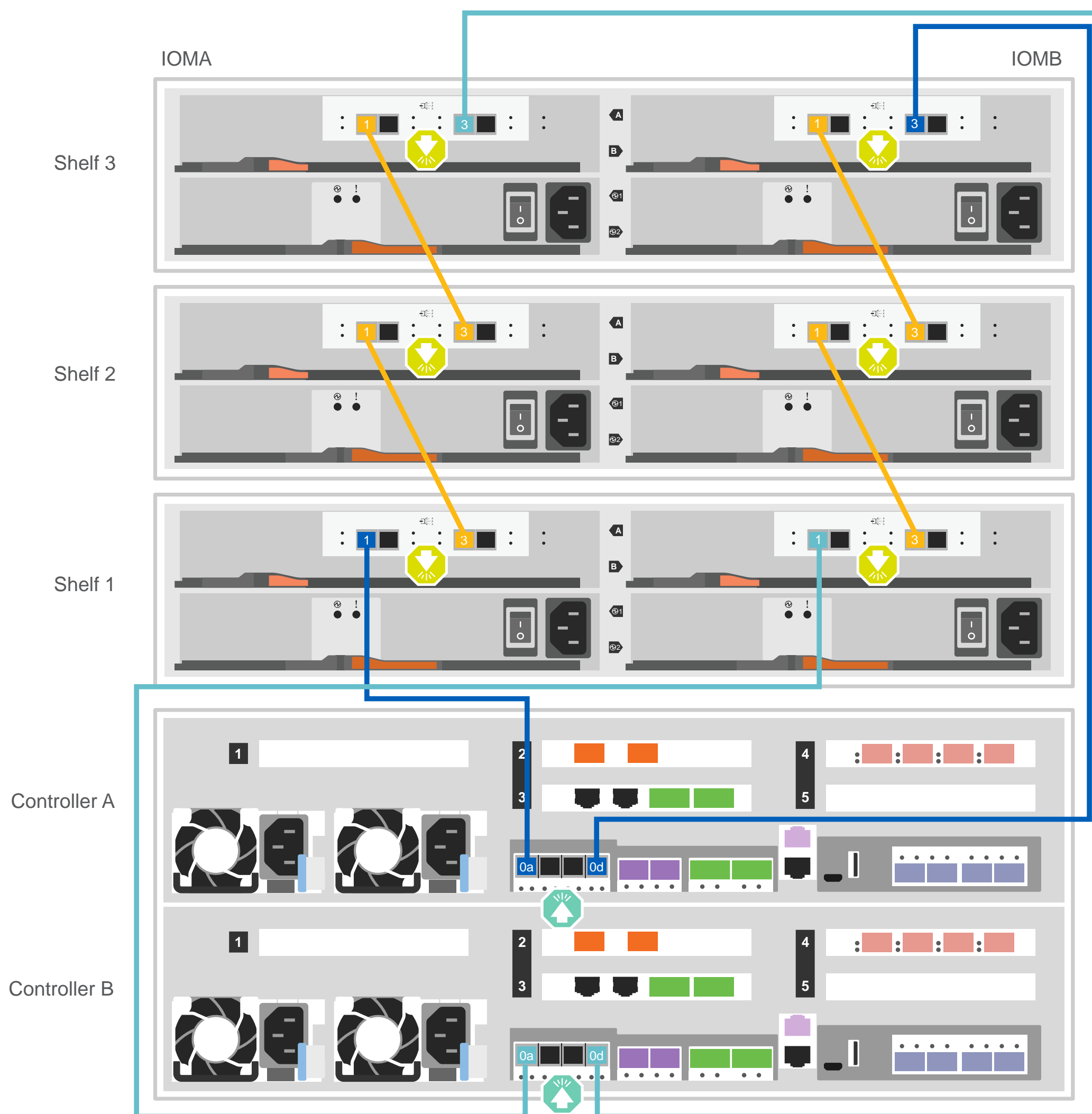
**Attention:** Be sure to check the illustration arrow for the proper cable connector pull-tab orientation.  
**Note:** To unplug a cable, gently pull the tab to release the locking mechanism.



## Cabling a DM7100F system to three DM240S shelves



- Connect the shelf-to-shelf ports
- Connect Controller A to the drive shelves
- Connect Controller B to the drive shelves





# Complete system setup and configuration | Stage 4

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

**Note:** Shelf IDs are pre-set to 00 and 01 on the DM240N drive shelves. If you want to change the shelf IDs, you must create a tool to access the button.

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 Powering 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 Completing initial cluster setup

1. Assign an initial node management IP address to one of the nodes:
  - 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 Storage Manager Guided Setup to configure your cluster:
  - a. Point your browser to the address you assigned in step 1.
  - b. Enter the data from your Cluster Configuration Worksheet.

**Note:** When using Guided Setup to configure your cluster, ensure that your service processor addresses are configured in an isolated network so that the addresses are not routable.

## 4 Completing setup

1. Go to <https://serviceconnect.lenovo.com/> and log in with your corporate account.
2. Choose **ThinkSystem Intelligent Monitoring** from the navigation pane to enter the ThinkSystem Intelligent Monitoring page.
3. Monitor health status of all your systems on the page.

### HELPFUL LINKS

- Lenovo Data Center Support Web site (worldwide):  
<http://datacentersupport.lenovo.com/>
- Lenovo Data Center Support Web site (China)  
<http://support.lenovo.com.cn/EsWeb/>
- ThinkSystem Storage Documentation  
<https://thinksystem.lenovofiles.com/storage/help/index.jsp>

Fourth Edition (October 2022)  
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