How to read a worksheet to cable controller-to-stack connections for quad-pathed connectivity - shelves with IOM12 modules

ONTAP Systems

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You can use this example to guide you through how to read and apply a completed worksheet to cable stacks of disk shelves with IOM12 modules for quad-pathed connectivity.

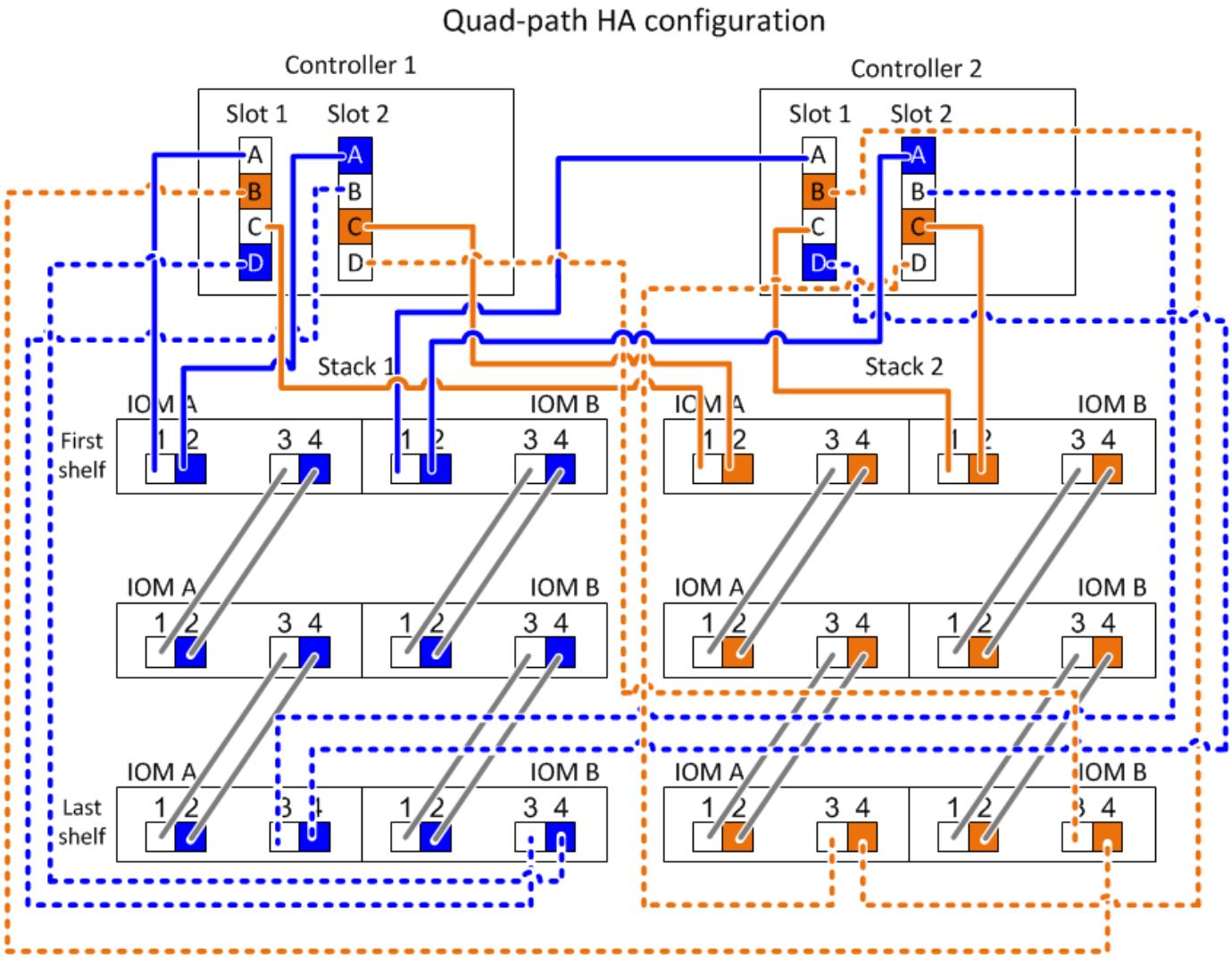
About this task

- This procedure references the following worksheet and cabling example to demonstrate how to read a worksheet to cable controller-to-stack connections.

  The configuration used in this example is a quad-path HA configuration with two quad-port SAS HBAs on each controller and two stacks of disk shelves with IOM12 modules.

- If you have a single-controller configuration, skip substeps b and d for cabling to a second controller.
- If needed, you can refer to SAS cabling rules for information about the controller slot numbering convention, shelf-to-shelf connectivity, and controller-to-shelf connectivity (including the use of port pairs).

Controller-to-Stack Cabling Worksheet for Quad-Pathed Connectivity									
Controller SAS ports	Controllers	Cable to disk shelf IOMs				Stacks			
		Shelf	IOM	Port		1		2	
				Multipathed	Quad-pathed	Port pairs			
A and C	1	First	A	1	2	1a	2a	1c	2c
	2	First	B	1	2				
B and D						~~1b~~	~~2b~~	~~1d~~	~~2d~~
	1	Last	B	3	4	2b	1d	2d	1b
	2	Last	A	3	4				



Steps

1. Cable port pair 1a/2b on each controller to stack 1:

   This is the multipathed cabling for stack 1.

   a. Cable controller 1 port 1a to stack 1, first shelf IOM A port 1.
   b. Cable controller 2 port 1a to stack 1, first shelf IOM B port 1.
   c. Cable controller 1 port 2b to stack 1, last shelf IOM B port 3.
   d. Cable controller 2 port 2b to stack 1, last shelf IOM A port 3.

2. Cable port pair 2a/1d on each controller to stack 1:

   This is the quad-pathed cabling for stack 1. Once completed, stack 1 has quad-pathed connectivity to each controller.

   a. Cable controller 1 port 2a to stack 1, first shelf IOM A port 2.
   b. Cable controller 2 port 2a to stack 1, first shelf IOM B port 2.
   c. Cable controller 1 port 1d to stack 1, last shelf IOM B port 4.
   d. Cable controller 2 port 1d to stack 1, last shelf IOM A port 4.

3. Cable port pair 1c/2d on each controller to stack 2:

   This is the multipathed cabling for stack 2.

   a. Cable controller 1 port 1c to stack 2, first shelf IOM A port 1.
   b. Cable controller 2 port 1c to stack 2, first shelf IOM B port 1.
   c. Cable controller 1 port 2d to stack 2, last shelf IOM B port 3.
   d. Cable controller 2 port 2d to stack 2, last shelf IOM A port 3.

4. Cable port pair 2c/1b on each controller to stack 2:

   This is the quad-pathed cabling for stack 2. Once completed, stack 2 has quad-pathed connectivity to each controller.

   a. Cable controller 1 port 2c to stack 2, first shelf IOM A port 2.
   b. Cable controller 2 port 2c to stack 2, first shelf IOM B port 2.
   c. Cable controller 1 port 1b to stack 2, last shelf IOM B port 4.
   d. Cable controller 2 port 1b to stack 2, last shelf IOM A port 4.