**SAS IO Card Cabling**

Directly connect the host servers to the storage system.

**SAS 4 Port Configuration**

1. Connect SAS fault domain 1 (in orange) to server 1.
   - Top storage controller: port 1 to port on server 1
   - Bottom storage controller: port 1 to port on server 1
2. Connect SAS fault domain 2 (in blue) to server 2.
   - Top storage controller: port 2 to port on server 2
   - Bottom storage controller: port 2 to port on server 2
3. Connect SAS fault domain 3 (in gray) to server 3.
   - Top storage controller: port 3 to port on server 3
   - Bottom storage controller: port 3 to port on server 3
   - Top storage controller: port 4 to port on server 4
   - Bottom storage controller: port 4 to port on server 4

**Fault domains provide fault tolerance at the storage controller level. Dell recommends using redundant cabling to avoid a single point of failure.**

1. Identify the protocol being used to connect the host servers to the disk array.
2. Refer to the diagram below for cabling guidelines that ensure the configuration has redundancy and failover capability.

**iSCSI Mezzanine Card Cabling**

If the storage system includes an iSCSI mezzanine card, connect the host servers and storage system to Ethernet switches.

**iSCSI 4 Port Mezzanine Card Configuration**

1. Connect each host server to both Ethernet switches.
   - Connections shown in orange belong to fault domain 1.
   - Connections shown in blue belong to fault domain 2.
2. Connect iSCSI fault domain 1 (in orange) to switch 1.
   - Top storage controller: port 1 to switch 1
   - Top storage controller: port 3 to switch 1
   - Bottom storage controller: port 1 to switch 1
   - Bottom storage controller: port 3 to switch 1
3. Connect iSCSI fault domain 2 (in blue) to switch 2.
   - Top storage controller: port 2 to switch 2
   - Top storage controller: port 4 to switch 2
   - Bottom storage controller: port 2 to switch 2
   - Bottom storage controller: port 4 to switch 2
Cable SCv300 or SCv320 Expansion Enclosures

To connect SCv300 or SCv320 expansion enclosures to the storage system:

1. Connect port 1 on the top storage controller to port 1 on the top EMM of the first expansion enclosure. Make sure that the latest supported HBA is installed. Install supported HBA drivers and make sure that HBAs have the latest supported firmware.
2. Connect the remaining expansion enclosures in series from port 2 to port 1 using the top EMAs.
3. Connect port 2 on the bottom EMM of the first expansion enclosure to port 2 on the bottom storage controller.
4. Connect the remaining expansion enclosures in series from port 3 to port 1 using the bottom EMM.
5. Connect port 3 on the right EMM of the first expansion enclosure to port 3 on the right storage controller.
6. Connect port 3 on the right EMM of the last expansion enclosure to port 2 on the top storage controller.

Cable SCv360 Expansion Enclosures

To connect SCv360 expansion enclosures to the storage system:

1. Connect port 1 (Orange) on the top storage controller to port 1 on the left EMM of the first expansion enclosure.
2. Connect the remaining expansion enclosures in series from port 3 to port 1 on the left EMM of each expansion enclosure. Make sure that the latest supported HBA is installed.
3. Connect port 3 on the right EMM of the last expansion enclosure to port 2 on the top storage controller.
4. Connect port 3 on the right EMM of all expansion enclosures to port 2 on the top storage controller.

WARNING: Do not plug the other end of the power cables into a grounded electrical outlet or a separate power source such as an uninterrupted power supply (UPS) or a power distribution unit (PDU).

CAUTION: Use the velcro straps to secure the power cables to the storage system chassis.

To connect the power cables:

1. Connect the power cables to both power supply/cooling fan modules in the storage system chassis.
2. Use the velcro straps to secure the power cables to the storage system chassis.
3. Plug the other end of the power cables into a grounded electrical outlet or a separate power source such as an uninterruptible power supply (UPS) or a power distribution unit (PDU).

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