

2.3.2 Port naming and distribution

In the field, fabric naming conventions vary. However, it is common to find fabrics that are named, for example, PROD_SAN_1 and PROD_SAN_2, or PROD_SAN_A and PROD_SAN_B. This type of naming convention is used to simplify the management and troubleshooting, after their denomination followed by 1 and 2 or A and B, which specifies that the devices connected to those fabrics contains the redundant paths of the same servers and SAN devices.

To simplify the SAN connection identification and troubleshooting, keep all odd ports on the odd fabrics, or “A” fabrics and the even ports on the even fabric or “B” fabrics, as shown in Figure 2-10.

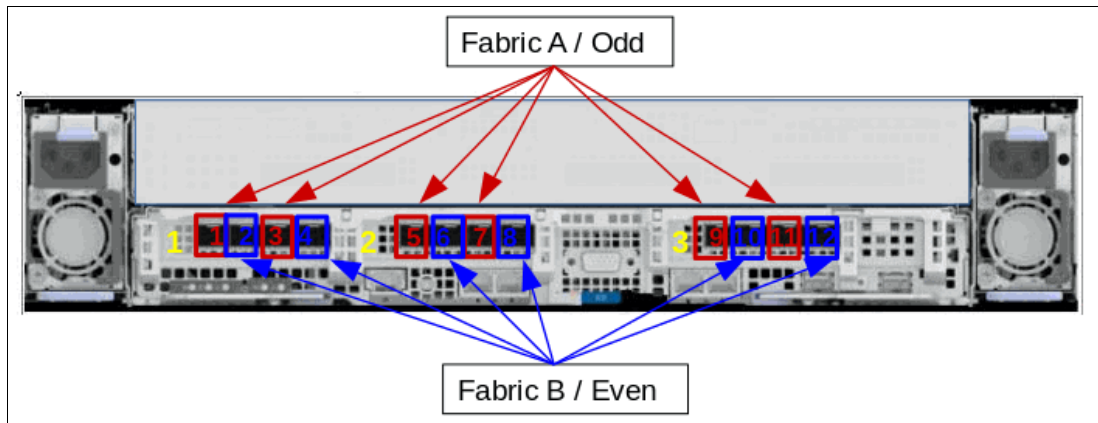


Figure 2-10 FlashSystem 9100 port distribution

As a preferred practice, assign specific uses to specific FlashSystem 9100 ports. This technique helps optimize the port utilization by aligning the internal allocation of hardware CPU cores and software I/O threads to those ports.

Figure 2-11 shows the specific port use guidelines for the FlashSystem 9100.

Card / Port	4 ports	8 ports	12 ports
Card 1 Port 1	Host/Storage/Inter-node	Host/Storage	Host/Storage
Card 1 Port 2	Host/Storage/Inter-node	Host/Storage	Host/Storage
Card 1 Port 3	Host/Storage/Replication*	Inter-node	Inter-node
Card 1 Port 4	Host/Storage/Replication*	Inter-node	Inter-node
Card 2 Port 1		Host/Storage	Host/Storage
Card 2 Port 2		Host/Storage	Host/Storage
Card 2 Port 3		Host/Storage/Replication*	Host/Storage/Replication*
Card 2 Port 4		Host/Storage/Replication*	Host/Storage/Replication*
Card 3 Port 1			Host/Storage
Card 3 Port 2			Host/Storage
Card 3 Port 3			Host/Storage
Card 3 Port 4			Host/Storage
localfcportmask	0011	00001100	000000001100
partnerfcportmask	1100	11000000	000011000000
* Use for host/storage in case no replication is in place. ** Do not use the same port for replication and inter-node traffic. *** For HyperSwap, dedicate ports for inter-node traffic			

Figure 2-11 Port masking configuration on FlashSystem 9100