FC CONNECTIVITY

The FC architecture supports three basic interconnectivity options point to point , arbitrated loop ,and Fibre Channel switched fabric.

POINT-TO-POINT

1. Point-to-point is simplest FC configuration in which two devices are connected directly to each other.
2. This configuration provides a dedicated connection for data transmission between nodes.
3. The point-to-point configuration offers limited connectivity , because only two devices can communicate with each other at a given time.
4. It can not be scaled to accommodate a large number of nodes.
5. Standard DAS uses point-to-point connectivity.

Fig. point to point connectivity

FIBRE CHANNEL ARBITRATED LOOP

1. In FC-AL configuration devices are attached to a shared loop.
2. FC-AL has a characteristics of a token ring topology and a physical star topology.
3. In FC-AL each device contents with other devices to perform I/O operations.
4. Devices on the loop must “arbitrated” to gain control of the loop. At any given time , only one device can perform I/O operations on the loop.
5. The FC-AL implementation may also use hubs whereby the arbitrated loop is physically connected in a star topology.

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