

IT 609

Network and System Administration

Fibre Channel

Tuesday October 26, 2021

Fibre Channel

Fibre Channel

When you need speed!

Fibre Channel

Networking standard

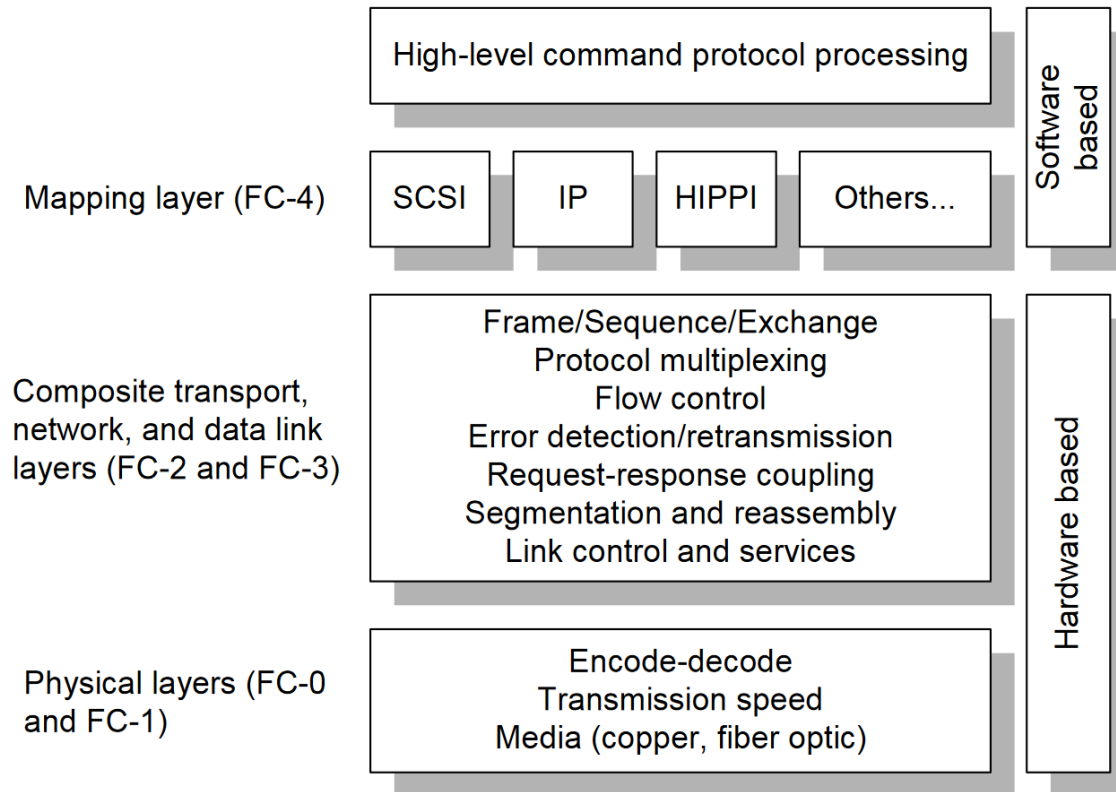
Very high speed

Flexible capabilities

Fiber optic or copper based

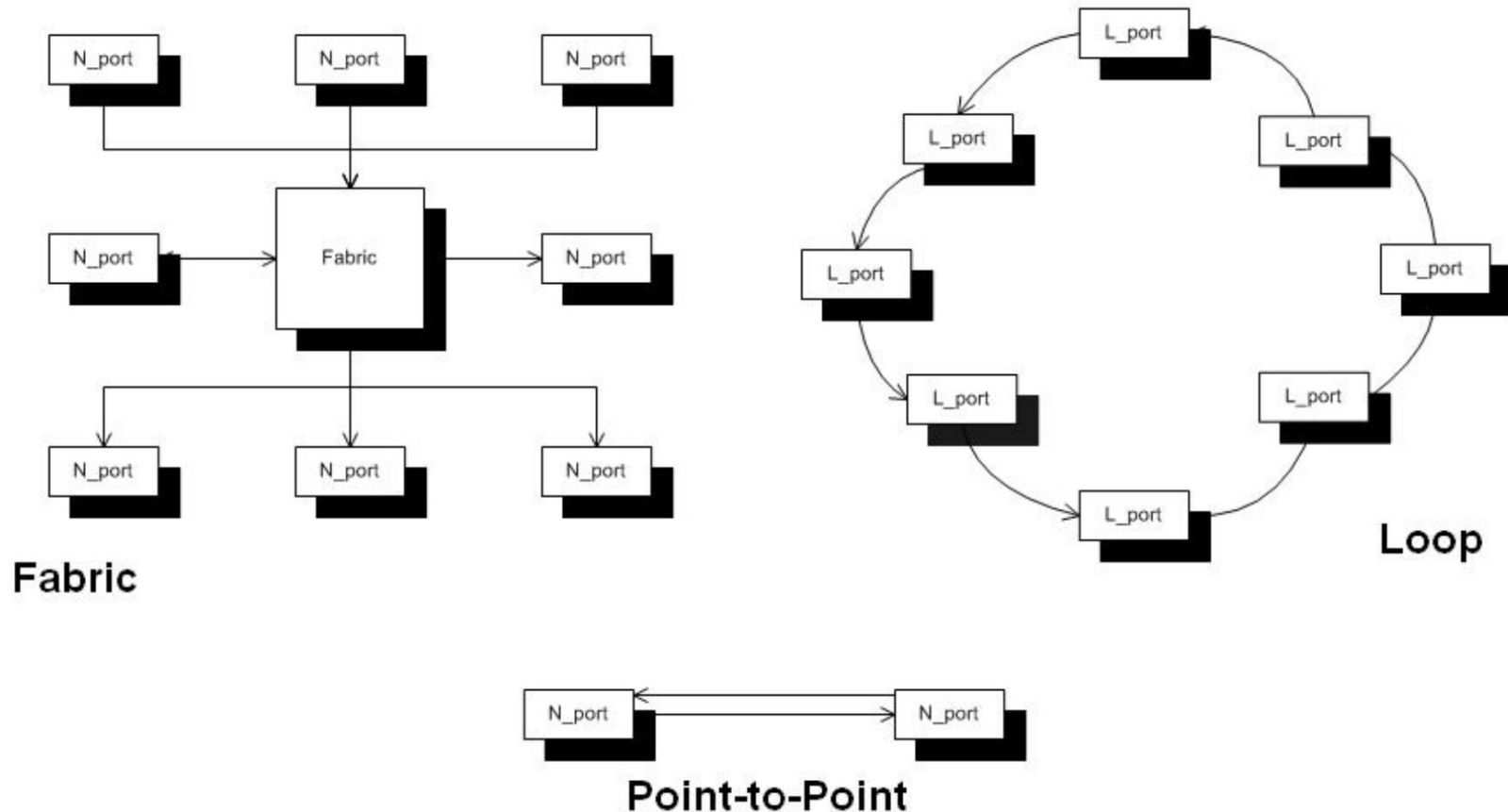
Frequently used for storage applications

Fibre Channel Layers



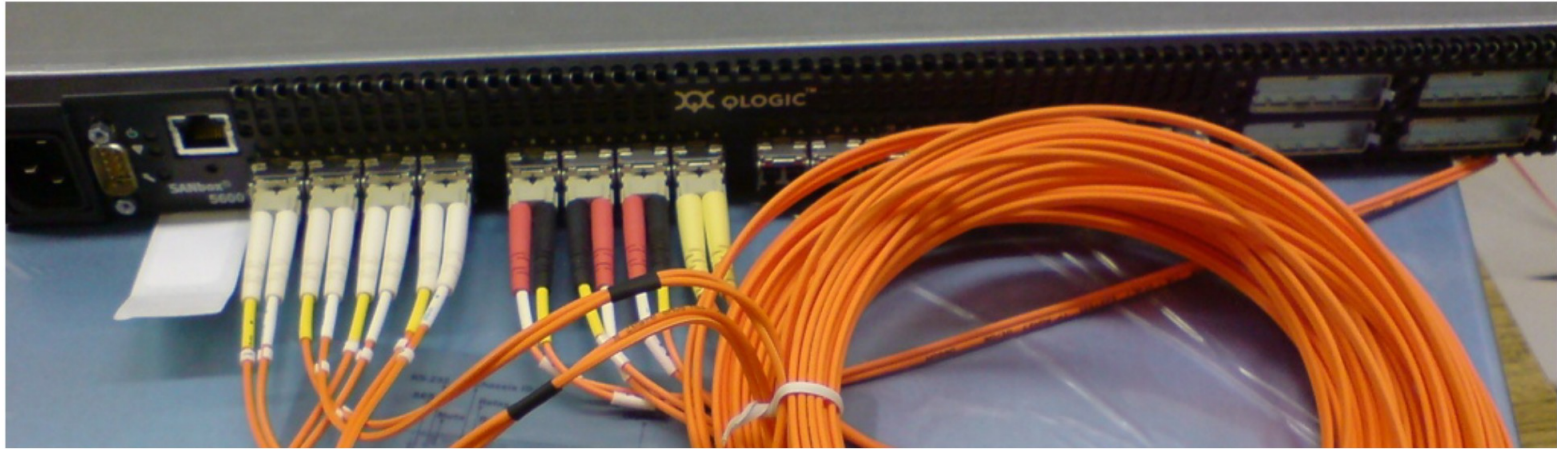
From Avery, Lynne. 2001. *Fibre Channel: Why another interface?*
<http://www.exabyte.com/support/online/documentation/whitepapers/fcwhyinterface.pdf>

Fibre Channel Topology

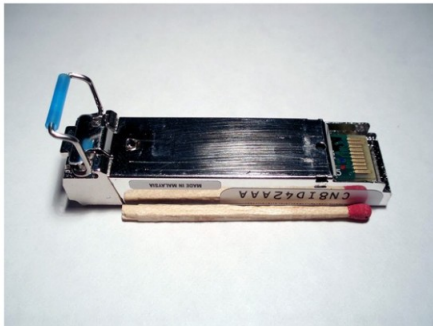


<http://en.wikipedia.org/wiki/File:FC-Topologies.jpg>

Fibre Channel Switch



<http://upload.wikimedia.org/wikipedia/commons/0/0d/ML-QLOGICNFCCONN.JPG>



Small form-factor
pluggable transceiver

<http://en.wikipedia.org/wiki/File:SFP-side.jpg>

Fibre Channel Advantages

Speed

2 Gbps & 4 Gbps are the norm today

8 Gbps for high-end applications

Low error rate

No collisions possible

Error rate of 10^{-12} = 1 bit for every 15 minutes

Hot pluggable/swappable

Long distances possible, up to 10 KM