

Two most common SAN deployments

- FC SAN
- IP SAN

HBA – Host Bus Adapter

DAS – Direct-attached Storage

FC SAN components

- node ports
- cables
- connectors
- interconnecting devices
- SAN management software

Fiber optic cables common connectors

- standard connector
- lucent connector
- straight tip

Interconnecting devices

- hubs
- switches
- directors

FC interconnectivity options

- point-to-point
- FC-AL
- FC-SW

ISL – interswitch link

Switched fabric port types

- G_Port
- N_Port
- E_Port
- F_Port

FC address composition

- domain ID
- area ID
- port ID

WWNN – World Wide Node Name

WWPN – World Wide Port Name

FC data structures

- information unit
- sequence
- frame

Fabric services

- fabric login server
- name server
- fabric controller
- management server

FC login types

- fabric login
- port login
- process login

Mesh topology

- full mesh
- partial mesh

Types of zoning

- port zoning
- WWN zoning
- mixed zoning

iSCSI components

- initiator
- target
- network

iSCSI host connectivity options

- standard NIC
- TOE NIC
- iSCSI HBA

iSCSI topologies

- native
- bridged
- combined

iSCSI discovery methods

- SendTargets
- internet storage name service

iSCSI names

- iSCSI qualified name
- extended unique identifier

IP SAN protocols

- iSCSI
- FCIP

FCoE network components

- converged network adapter
- cable
- FCoE switch

lossless Ethernet functionalities

- priority-based flow control
- enhanced transmission selection
- congestion notification
- data center bridging exchange protocol

file sharing methods

- FTP
- DFS
- NFS/CIFS
- P2P

NAS head components

- network interface
- protocol (NFS/CIFS)
- OS
- storage interface

NAS device components

- NAS head
- storage array

NAS file sharing protocols

- CIFS
- NFS

NAS implementations

- unified
- gateway
- scaled

object contents

- data
- object id
- attributes
- metadata

osd components

- osd node
- internal network
- storage

storage node components

- metadata service
- storage service

unified storage components

- storage
- nas head
- osd node
- storage controller