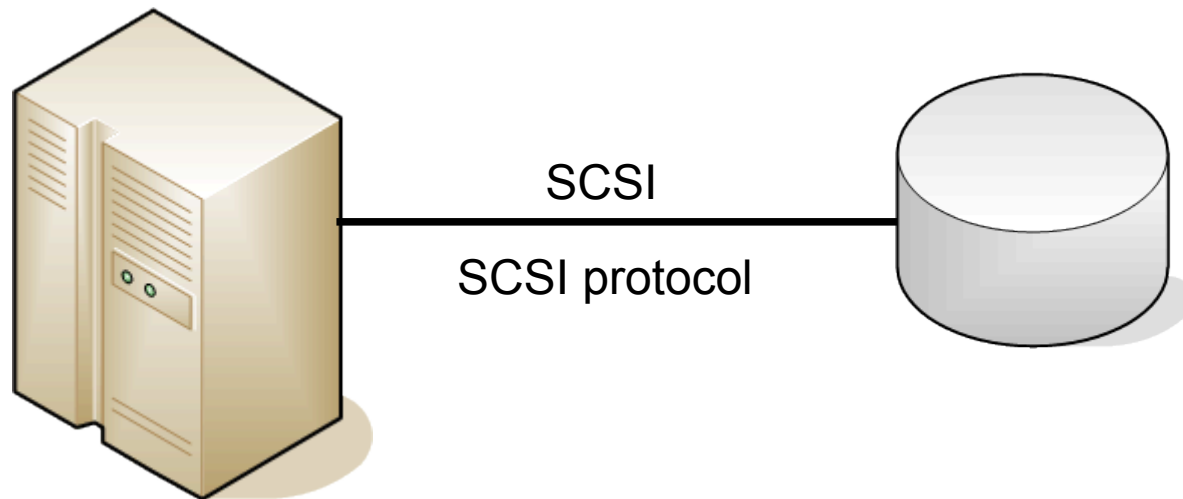


# Y36PSI

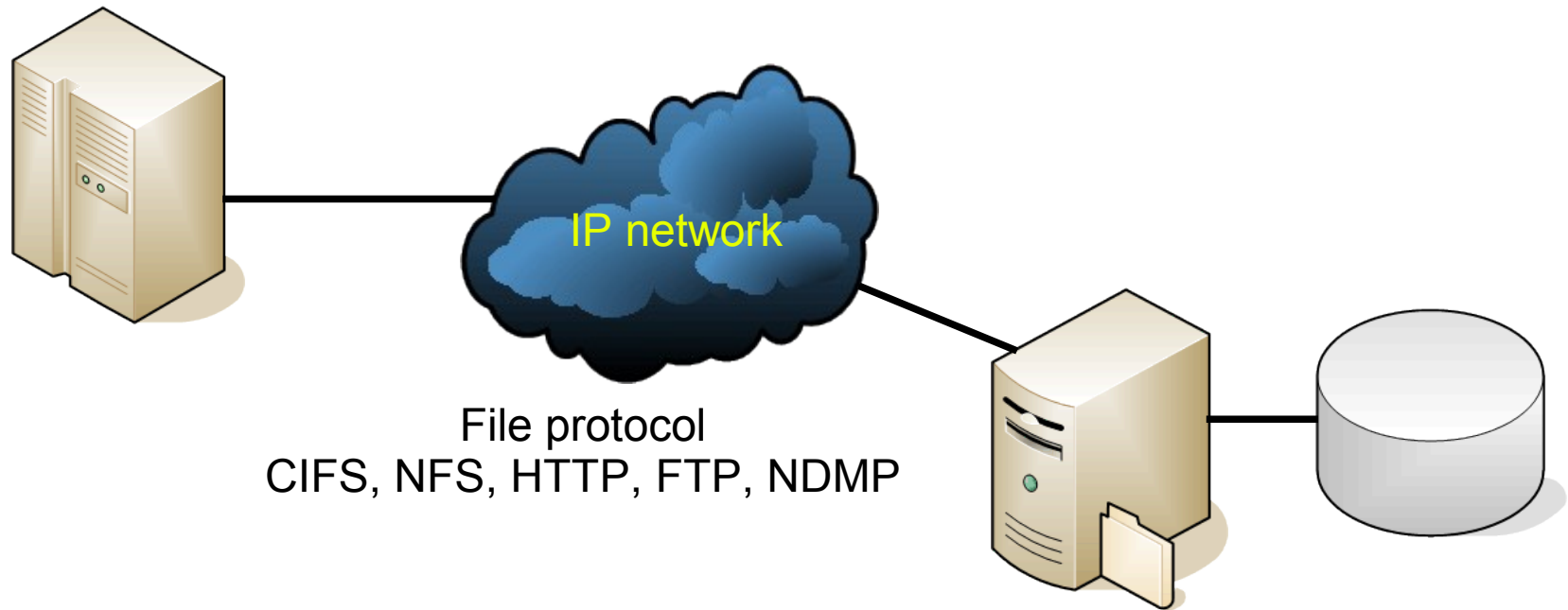
## Ukládání dat



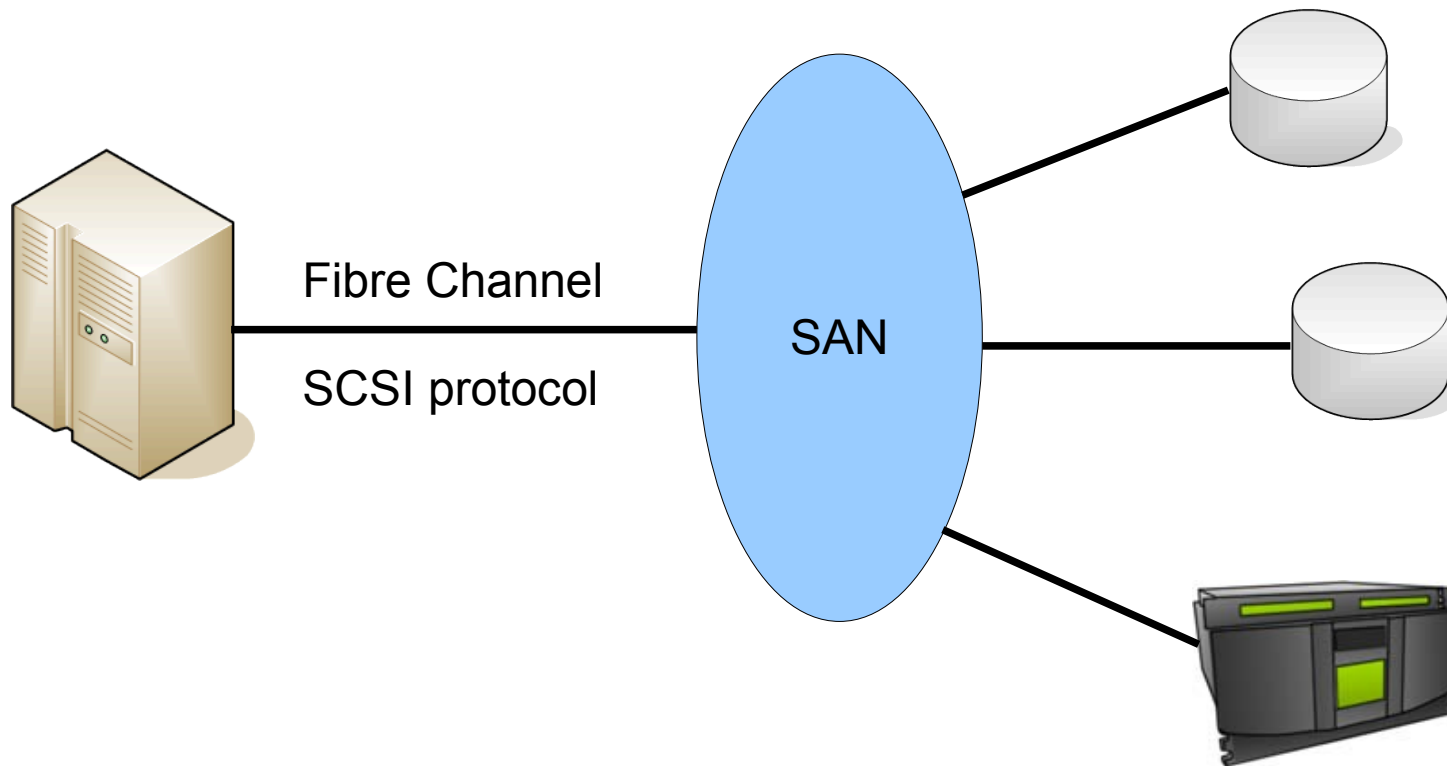
# Direct Attached Storage



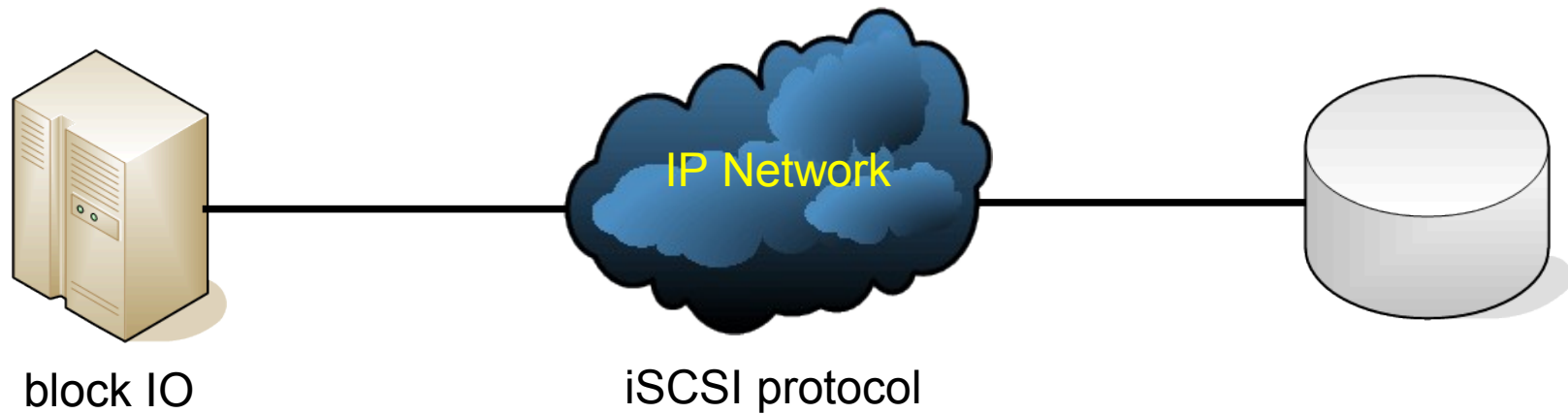
# Network Attached Storage



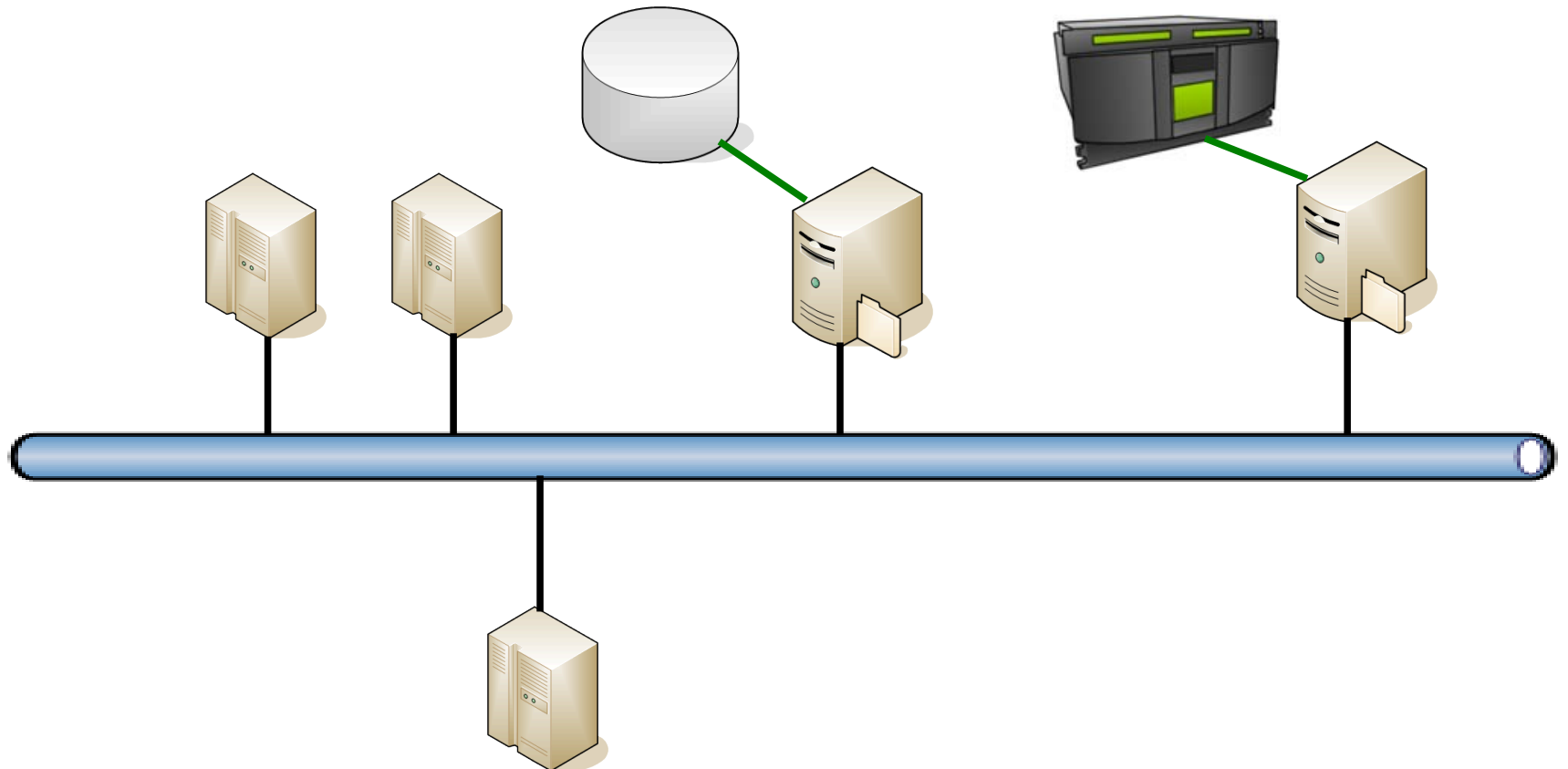
# Storage Area Network



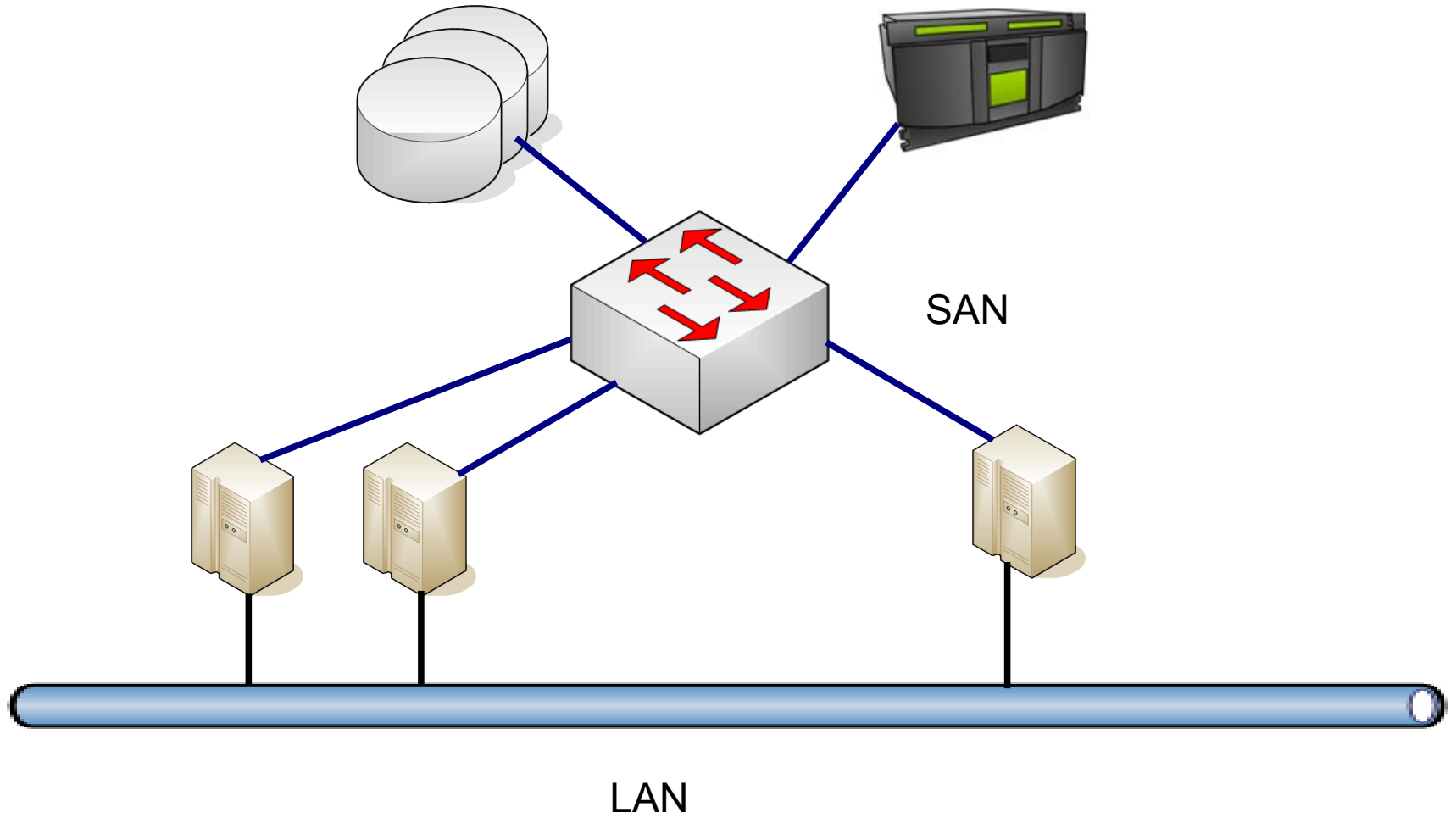
# iSCSI Attached Storage



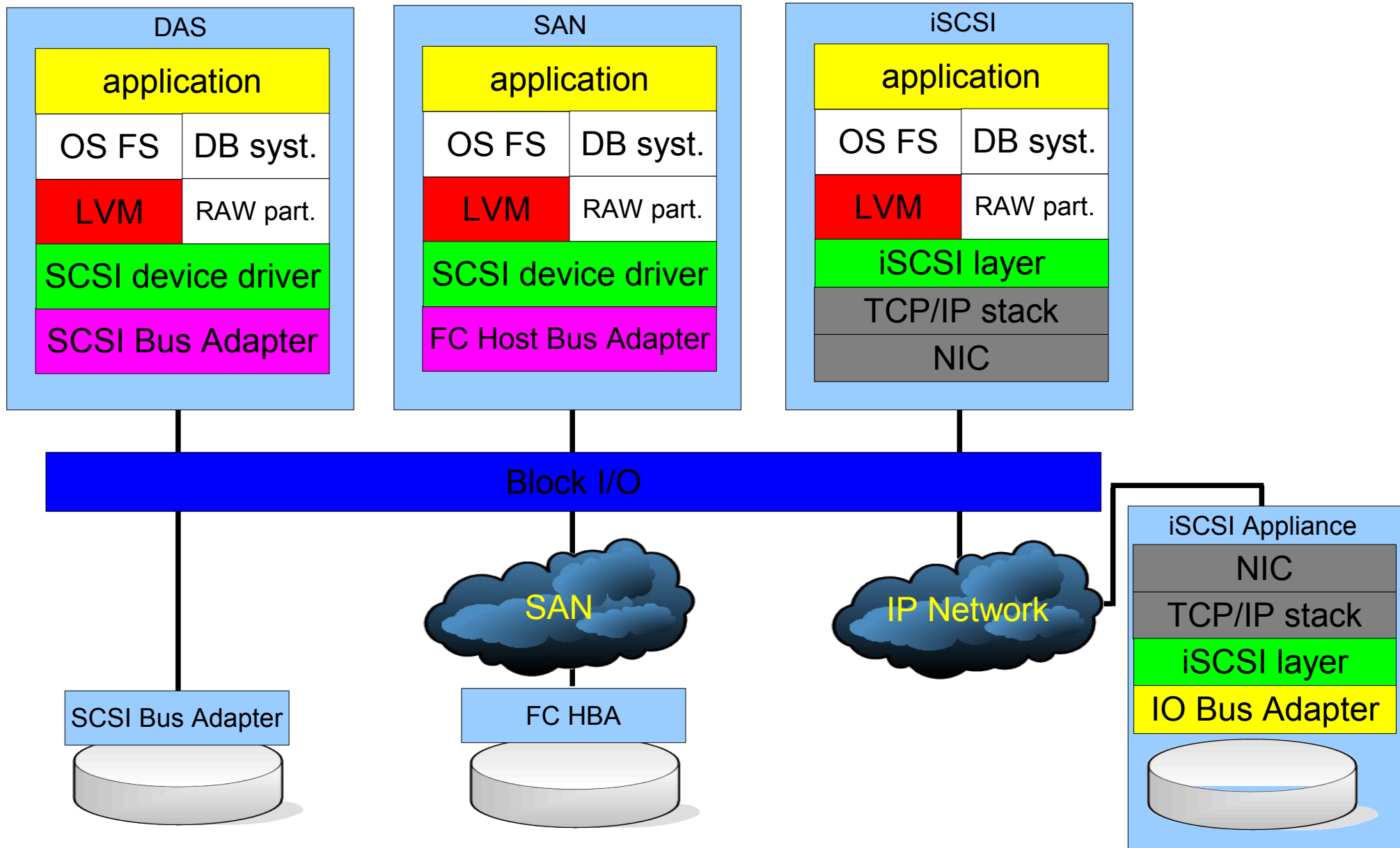
# LAN - NAS



# LAN - SAN

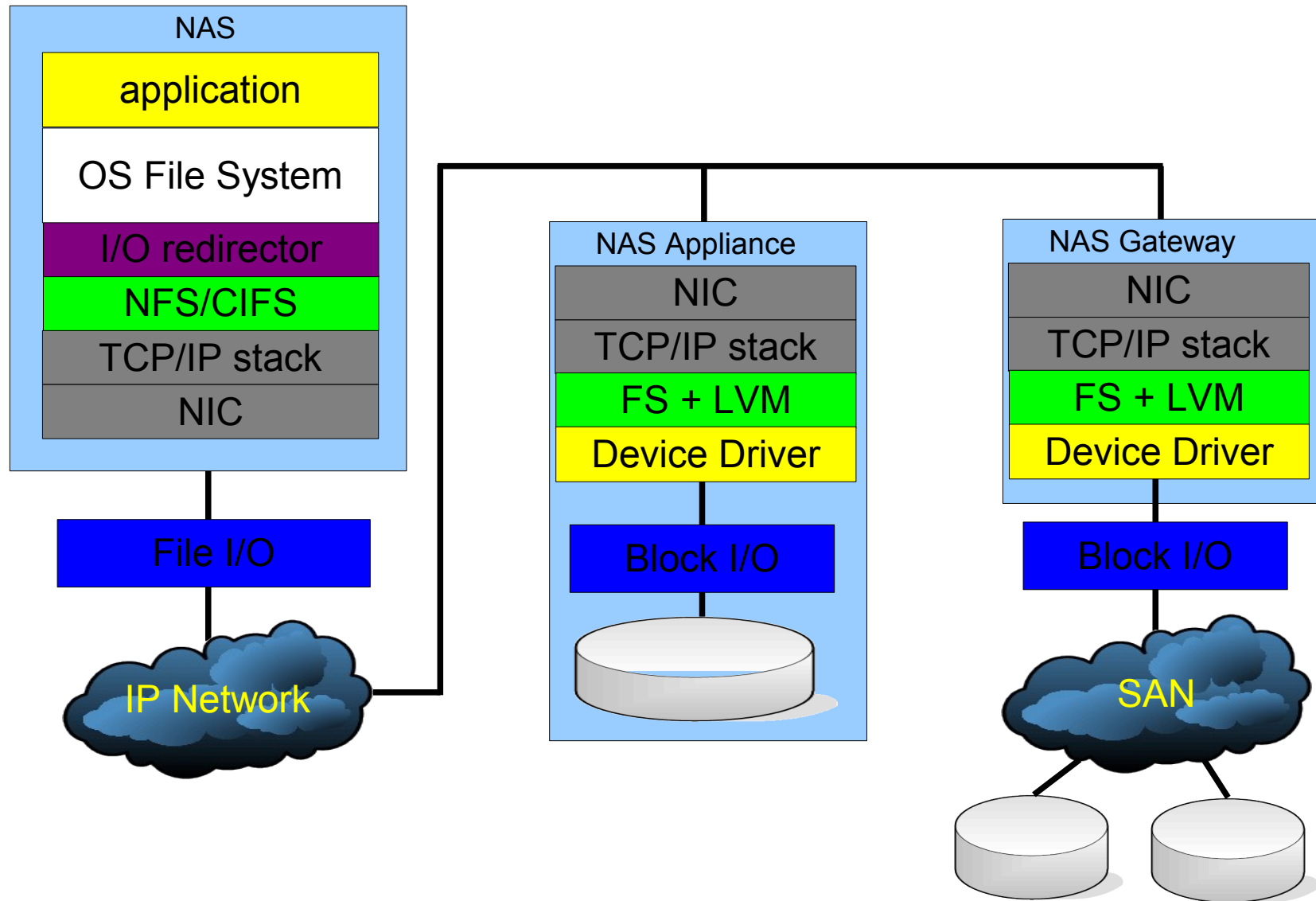


# Přenos dat



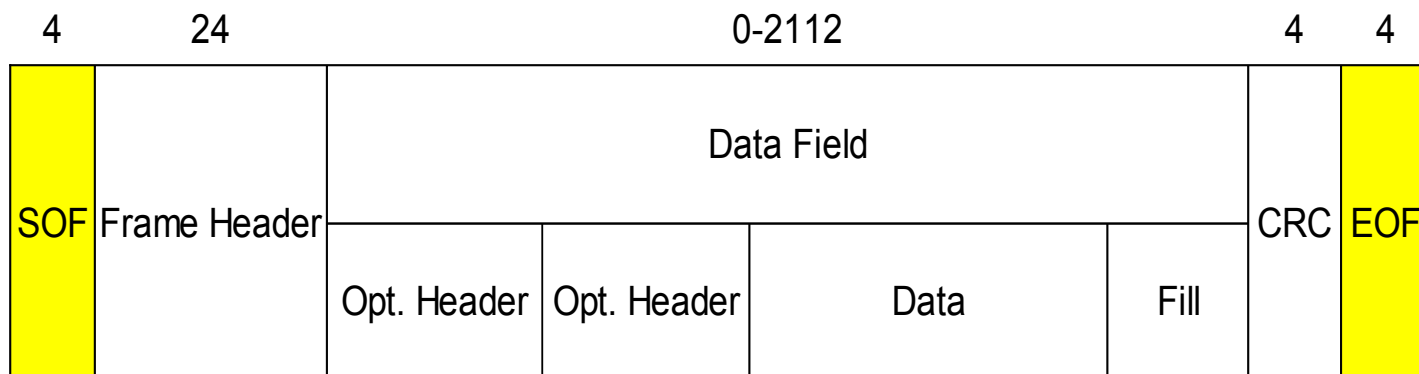


# Přenos dat II



# Fibre Channel

- T11.org
- Point-to-Point
- Arbitrated Loop
- Switched Fabric
- 100/200/400/800/1200 MB/s
- podpora řízení toku



# Internet SCSI – iSCSI

- rfc3720
- přenos SCSI příkazů pomocí TCP
- HyperSCSI – SCSI over Ethernet
- podpora HW i SW



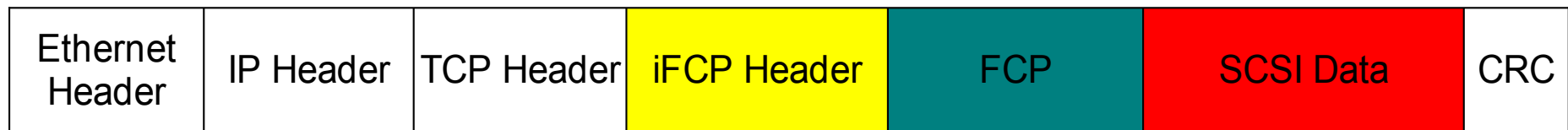
# Fibre Channel over IP FCIP

- rfc3821
- tunelování FC přes TCP
- vytváří jednu FC strukturu

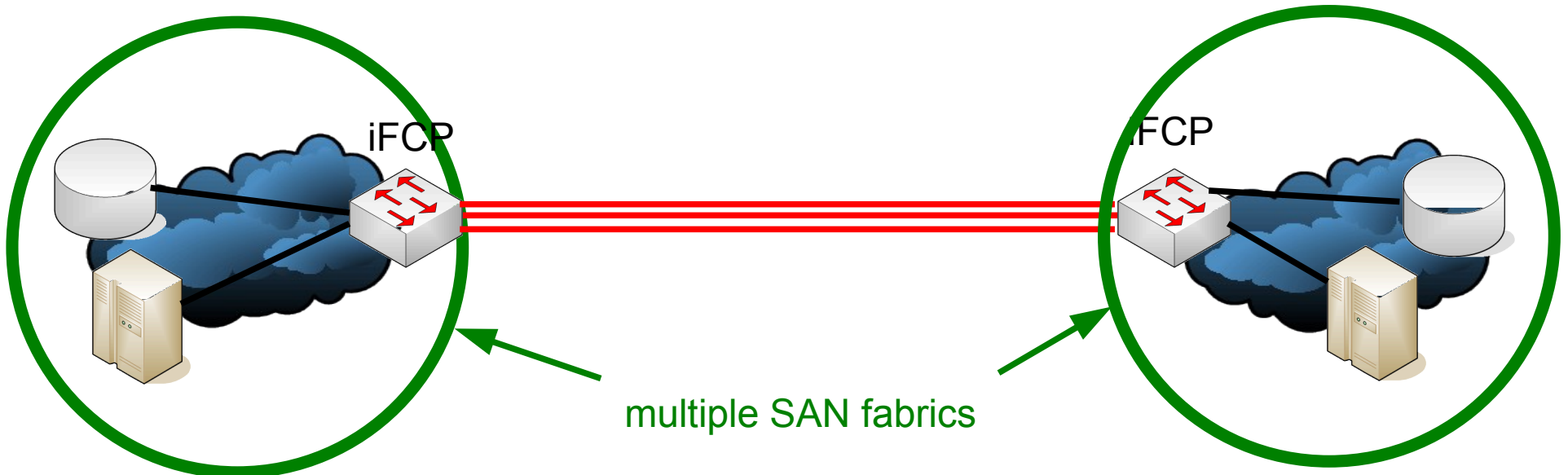
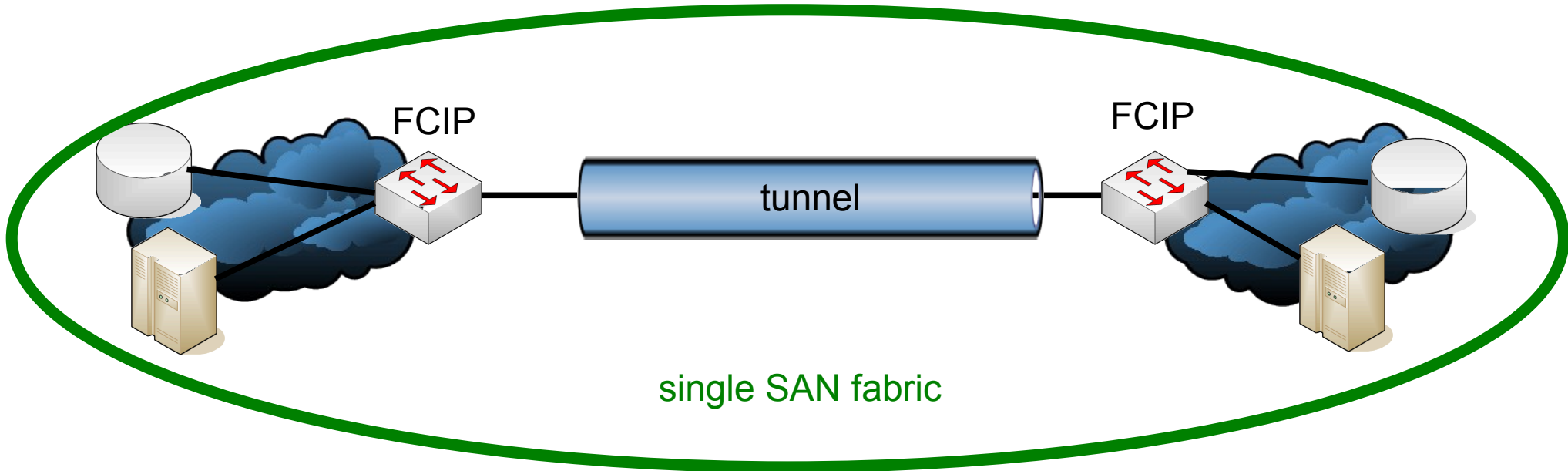


# Internet Fibre Channel Protocol iFCP

- rfc4172
- gateway – gateway protokol
- iFCP mapuje FC na IP adresy
- iFCP mapuje FC session na TCP session
- propojuje různé FC struktury



# FCIP x iFCP



# ATA over Ethernet

- přímé vkládání ATA příkazů do Ethernetových rámců – nelze směrovat
- navržen firmou Coraid
- <http://www.coraid.com/documents/AoEr8.txt>
- eth typ 0x88A2
- přenos - max 2 sektory

# IPv4, IPv6, ARP over FC

- rfc4338
- encapsulace IP do FC
- využití FC-4 vrstvy
- aby nebyla nuda :-)



bezpečnost SAN  
HA  
adresace  
implementace