bwDataArchiv Data Protection
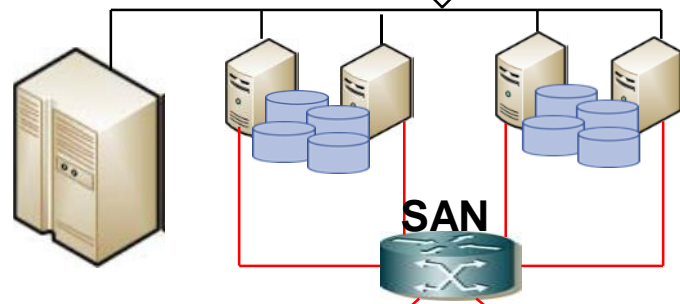
Clients

BwDataArchiv Access Point SFTP & GridFTP Servers

HPSS FUSE
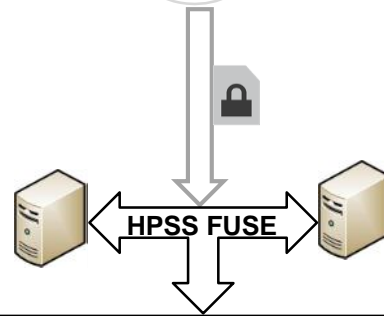
HPSS Core HPSS Movers

SAN

Tape Drives

Primary Copy   **Secondary Copy**

- **Transport layer encryption**
  - **transmission protocols (SFTP/GridFTP) encrypt data on the fly**
  - **successful decryption assures error free data transfer between client and bwdataArchiv access point**

- **Data integrity**
  - **bwDataArchiv access point calculates MD5 checksum of every single file on reception**
  - **data is verified against the checksum when a file is read by client**
  - **corrupted files flag an error on the client but are not send to the client**
  - **user informs admins who will start recovery of data from the secondary data copy**