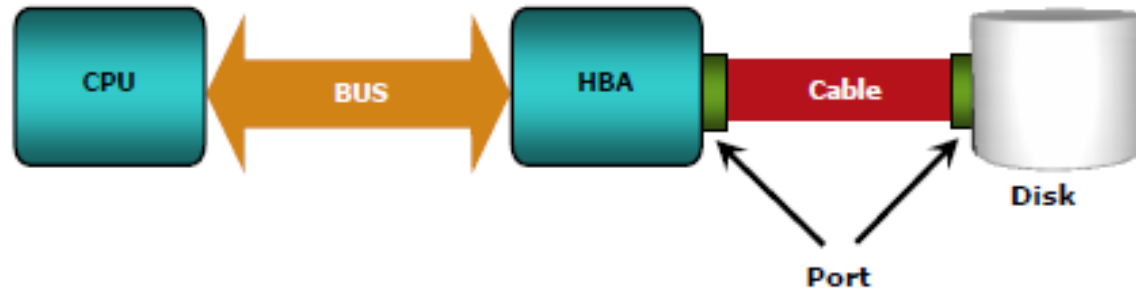


## **SAN & STORAGE**

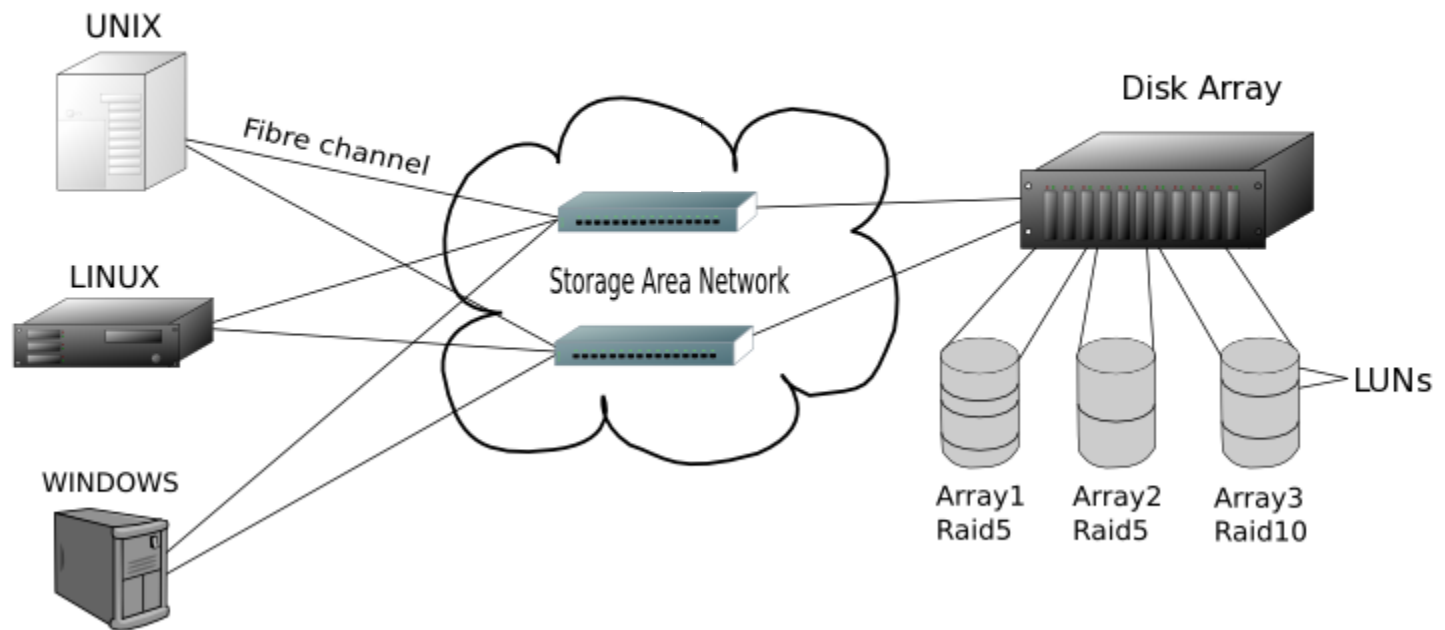
## ***Connectivity***

- Interconnection between hosts or between a host and any storage devices
- Physical Components of Connectivity are:
  - Bus, port and cable



## Connectivity

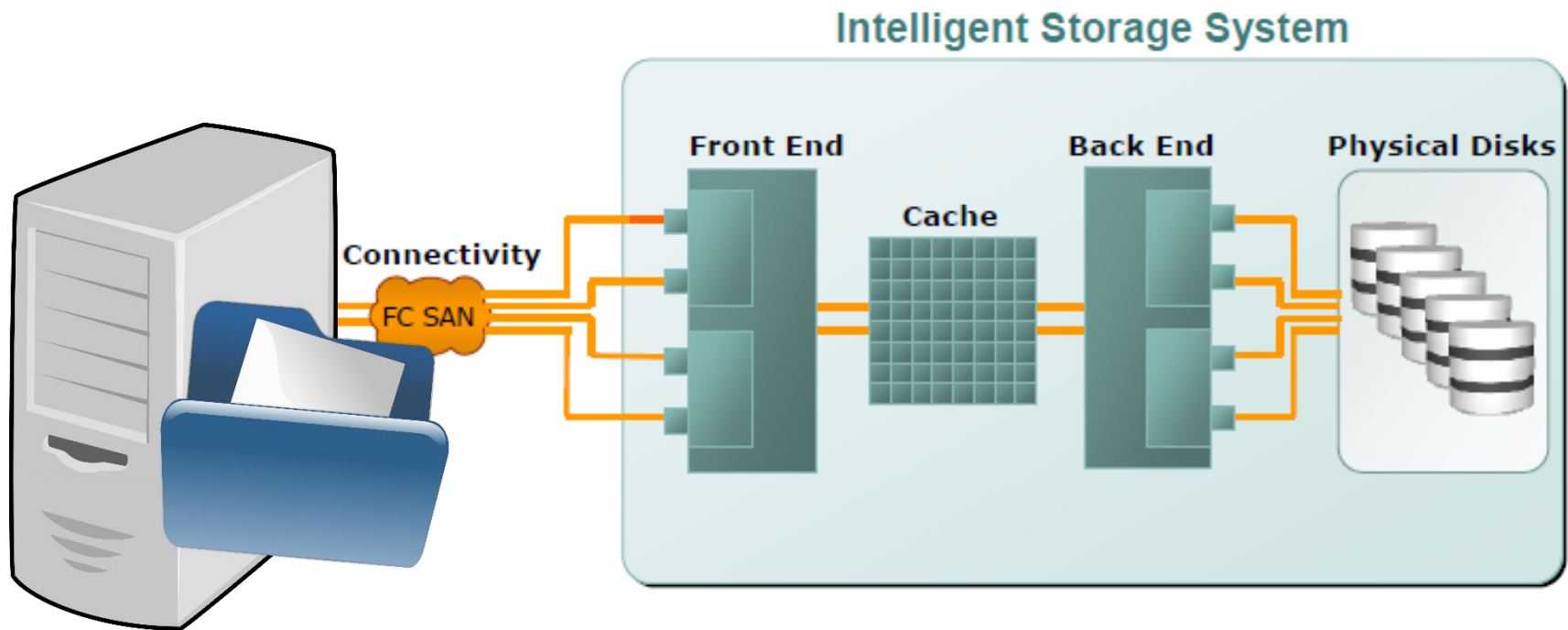
- Storage Area Network



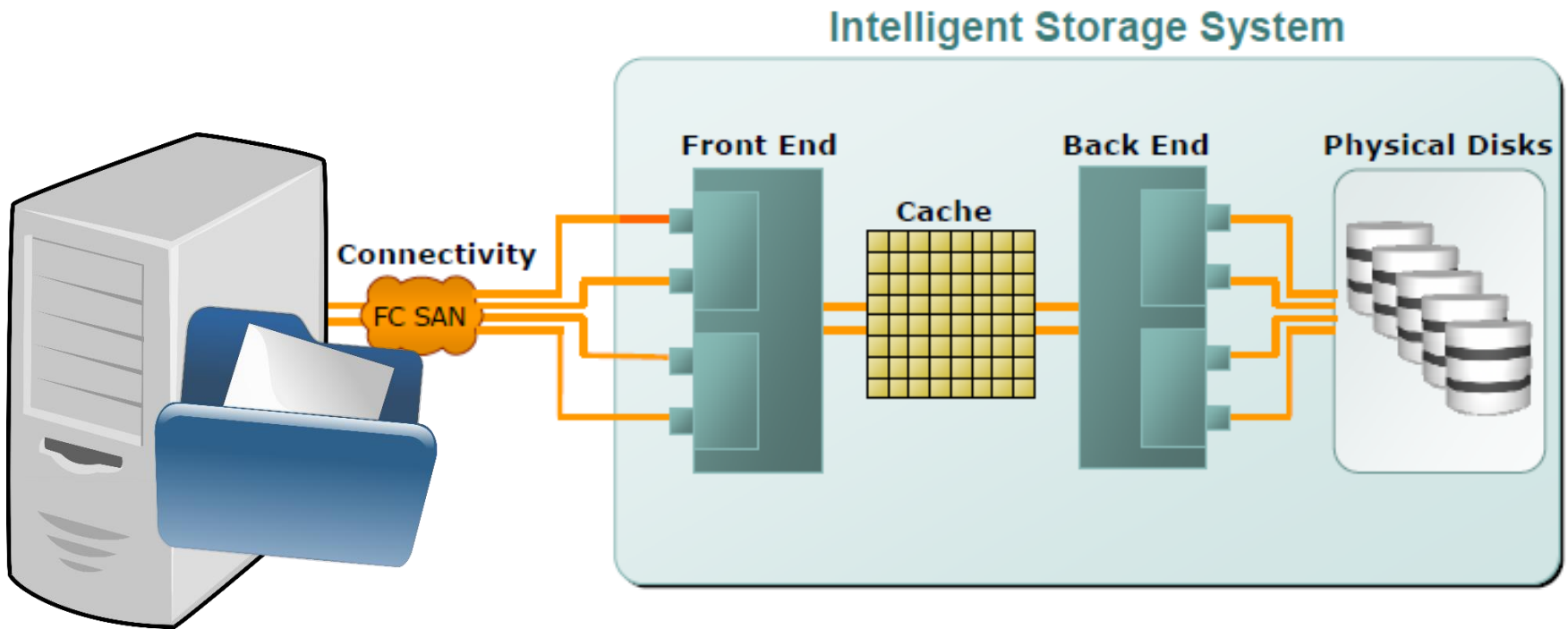
## ***What is an Intelligent Storage System***

- Highly optimized for I/O processing
- Have large amounts of cache for improving I/O performance
- Have operating environments that provide:
  - **Intelligence for managing cache**
  - Array resource allocation
  - Connectivity for heterogeneous hosts
  - Advanced array based local and remote replication options

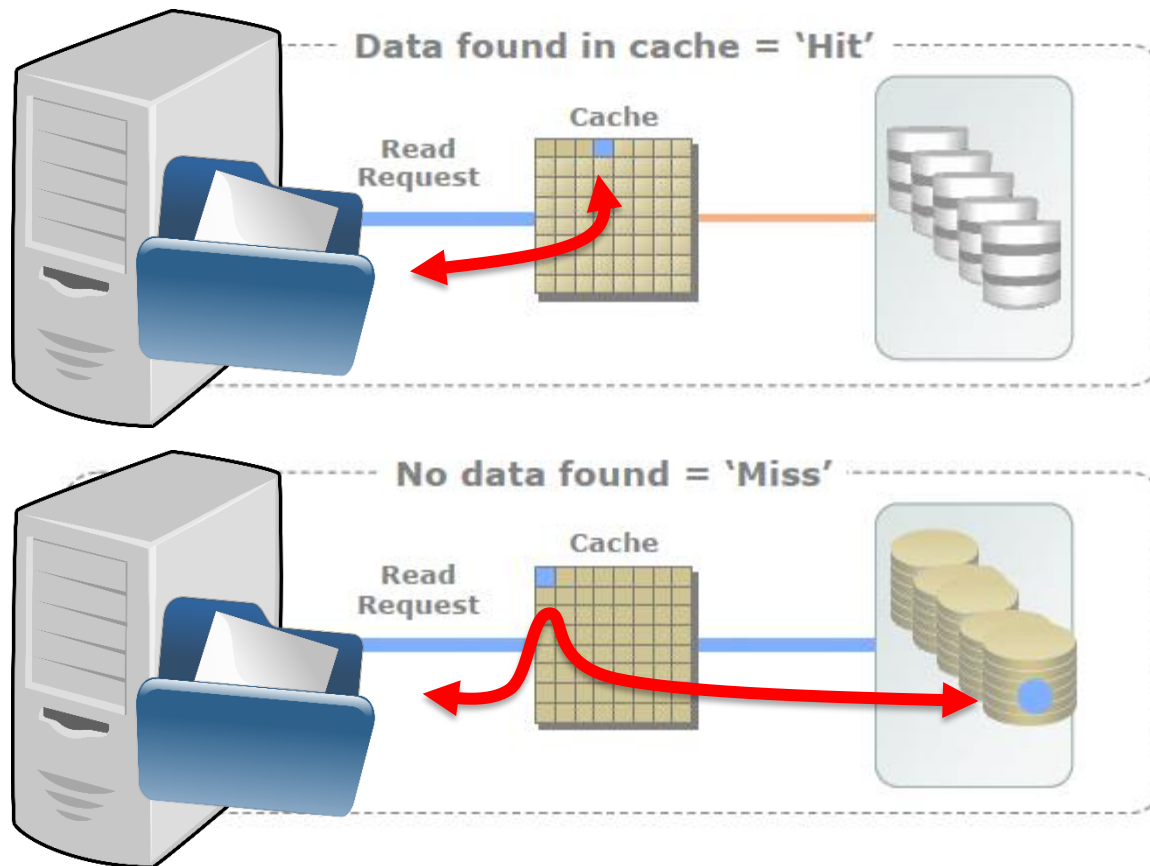
## *Components of an Intelligent Storage System*



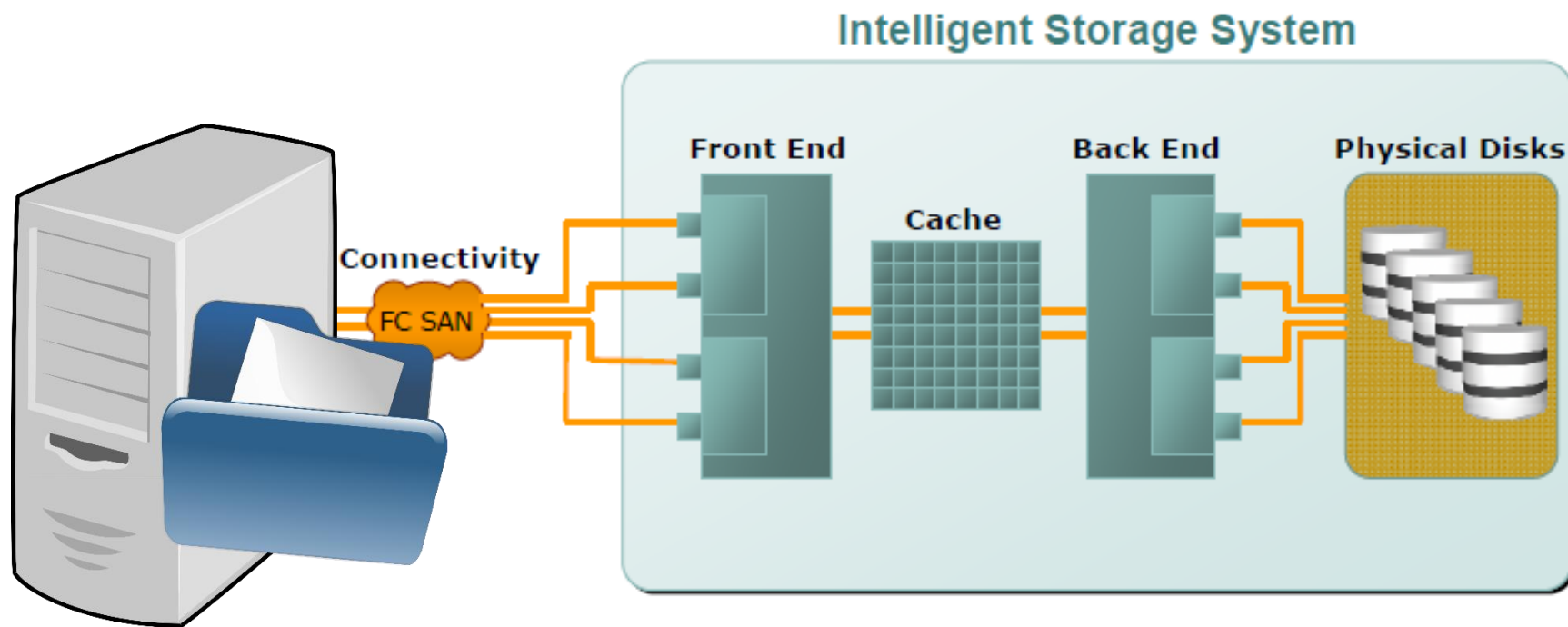
## *Intelligent Storage System: Cache*



## ***Read Operation With Cache: "Hits" and "Misses"***



## *Intelligent Storage System: Physical Disk*





## ***Disk Drive Performance***

- Disk Service Time
  - Time taken by a disk to complete an I/O request is sum of:
    - ✓ Seek Time
    - ✓ Rotational Latency
    - ✓ Data Transfer Rate

