

Operating System: Mass Storage System

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1 Hard drive

- block - track - sector - cylinder - platter
- CD/DVD spinning speed can be adjusted
- seek + rotation + transfer time

2 Disk Scheduling

- OS maintains queue of requests
- OS minimize seek time
- disk manufacturer minimize rotational time

2.1 FCFS Scheduling

- first come first serve

2.2 SSTF Scheduling

- shortest seek time first (from current position)
- suffer from starvation

2.3 SCAN

- start at one end, moves toward the other end

2.4 C-SCAN

- when reaching the other end, directly move back to start point