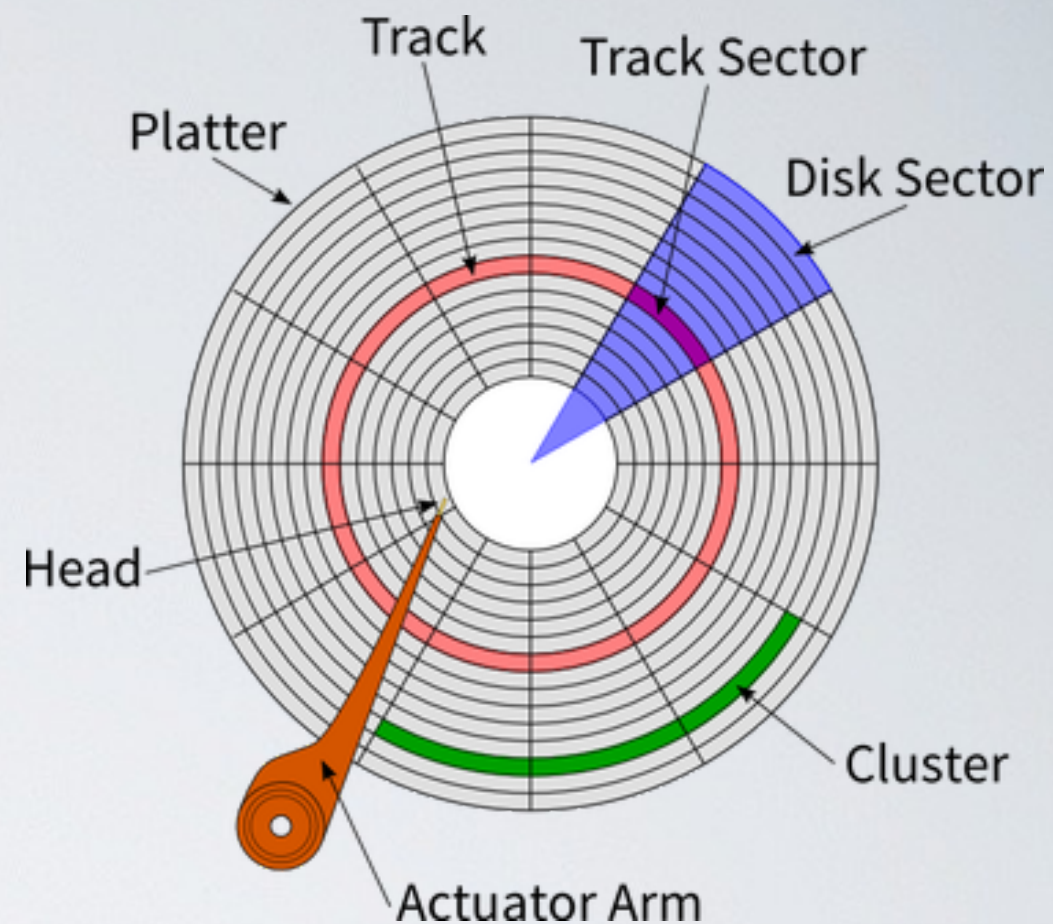


HDD Interface



- ➡ Disk interface presents linear array of sectors
 - Historically 512 Bytes but 4 KiB in "advanced format" disks
 - Written atomically (even if there is a power failure)
- ✓ Disk maps logical sector #s to physical sectors
- ✓ OS doesn't know logical to physical sector mapping

Seek, Rotate, Transfer

Seek - move head to above specific track

1. speedup – accelerate arm to max speed
2. coast – at max speed (for long seeks)
3. slowdown – stops arm near destination
4. settle – adjusts head to actual desired track

- Seeks is slow

- settling alone can take 0.5 to 2ms
- entire seek often takes 4 - 10 ms