

# Server Optimizations

- **Server caching** is one of the big reasons NFS is so fast with reads
  - Server Caching = Store, in memory, some of the recently-accessed blocks (of files and directories)
  - Most programs (written by humans) tend to have *locality of access*
    - Blocks accessed recently will be accessed soon in the future
- **Writes: two flavors**
  - **Delayed write**: write in memory, flush to disk every 30 s (e.g., via Unix sync operation)
    - Fast but not consistent
  - **Write-through**: Write to disk immediately before ack-ing client
    - Consistent but may be slow