

Level 5 (Block-Level Distributed XOR) — Distributed parity information. See potential for write concurrency. Performance efficiency/redundancy trade-off.

DISK CACHE — Main memory buffer contains copy of disk sectors. Uses finite space, so need a **replacement policy** when buffer full.

LRU — Cache consists of stack of blocks, remove block in cache longest with no references. Use a stack of **pointers** instead of moving blocks around in main memory.

LFU — Replaces block that has experienced fewest references. **Counter** associated with each block, incremented each time block accessed.

Frequency-Based — Divide LRU stack into new/old sections. Block referenced → move to top of stack. Only increment reference count if not already in new. Replace block with reference count in old.

To prevent blocks “age out” too quickly, could use three sections and still only replace blocks from old.