Directory Based Cache Coherence Protocol.

- Drawbacks of Bus-Based C.C.P.
  - Bus becomes the bottleneck.

**Directory protocol**

- States: uncached, cached in multiple nodes & readable or cached exclusively and writable in exactly one node.

- Sharers: set of processors which have copy of a memory block.
Protocol: (Directory's behavior)
Upon recv of req. for a block that is uncached.

1. Read miss:
   a. Requesting processor, say P, is sent
      the requested block from memory
   b. Sharing (B) = {P}\ State (B): shared.

2. Write Miss:
   a. 
   b. Sharing (B) = {P}\ State (B): exclusive.

Upon recv.

Rd. pg 234-237 of CAQA book.