

Figure 1. Phase 1 is to establish the proposer with a highest sequence number via prepare and promise messages. Phase 2 is for the proposer to replicate a value to its peers. Once accepted by the acceptor, the value can now be learned by the learners.

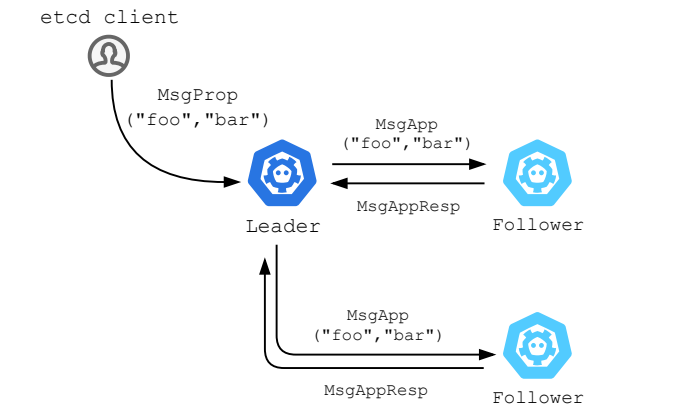


Figure 2. Paxos-Raft proposal flow from leader to its followers. The MsgProp of a proposed value will be sent or forwarded to the single established leader. And the leader replicates the value to its follower using MsgReply (append to the log).

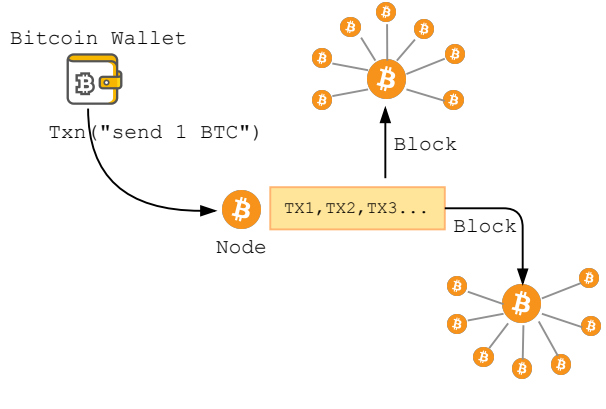


Figure 3. Bitcoin block is replicated over peer-to-peer network. As soon as a new Bitcoin block is mined, the node broadcasts the block to all of its peers, and so on.

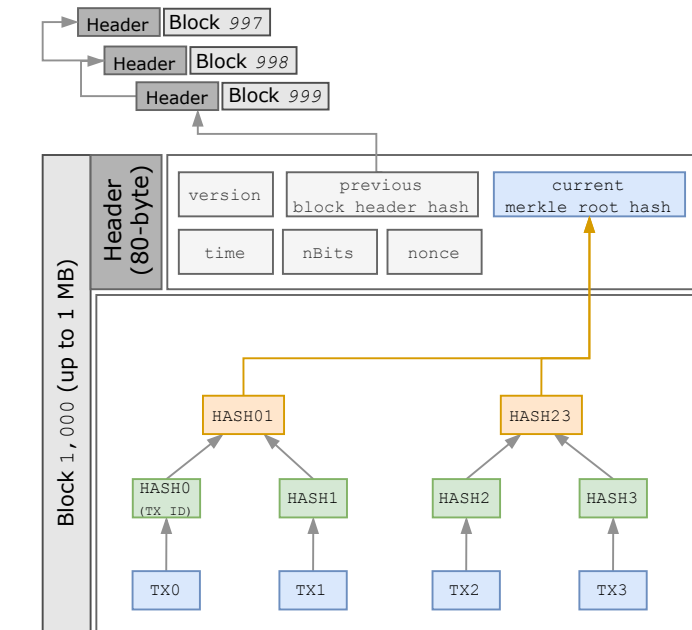


Figure 4. A Bitcoin block is mined when the node finds the "nonce" that outputs the block header hash equal to or below the "target" threshold ("nBits"). The merkle root represents the hash of all transactions in the block.

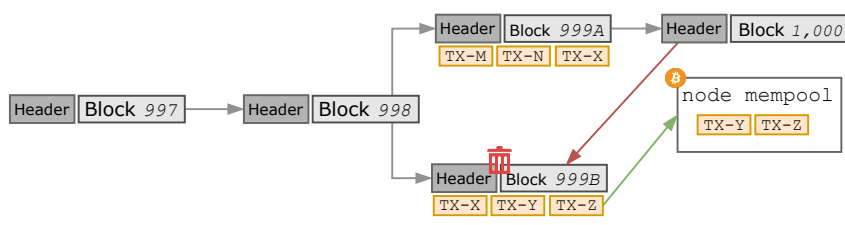


Figure 5. Two Bitcoin blocks may arrive at the same time. The node keeps both and starts extending on the first one. When the node hears or mines a new block 1,000 that was built on top of 999A, it chooses the chain with 999A and purges the other block 999B and returns the transactions in 999B but not in 999A to its mempool.