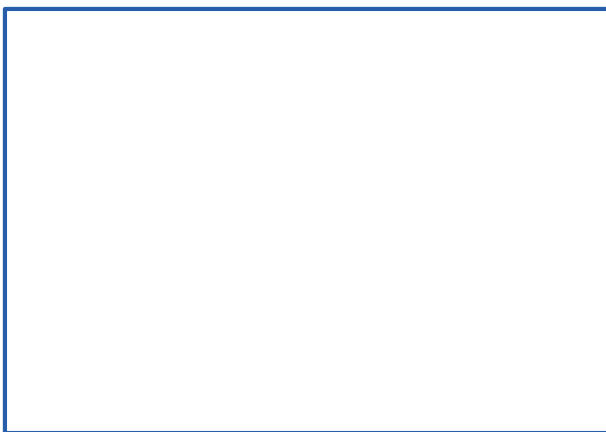


In Search of an Understandable Consensus Algorithm (Extended Version)

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Election Safety:

RPCs from a leader or candidate. Leaders send periodic heartbeats (AppendEntries RPCs that carry no log entries) to all followers in order to maintain their authority. If a

tifying its position in the log.

The leader decides when it is safe to apply a log entry to the state machines; such 88993(n)-24c entry is called

lowers, just followers can now reorganize their data.

We considered an alternative leader-based approach in

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trates as much functionality as possible in the leader. This approach results in a simpler algorithm that is easier to understand. For example, in Paxos, leader election is orthogonal to the basic consensus protocol: it serves only as

- [24] LORCH, J. R., ADYA, A., BOLOSKY, W. J., CHAIKEN, R., DOUCEUR, J. R., AND HOWELL, J. The SMART