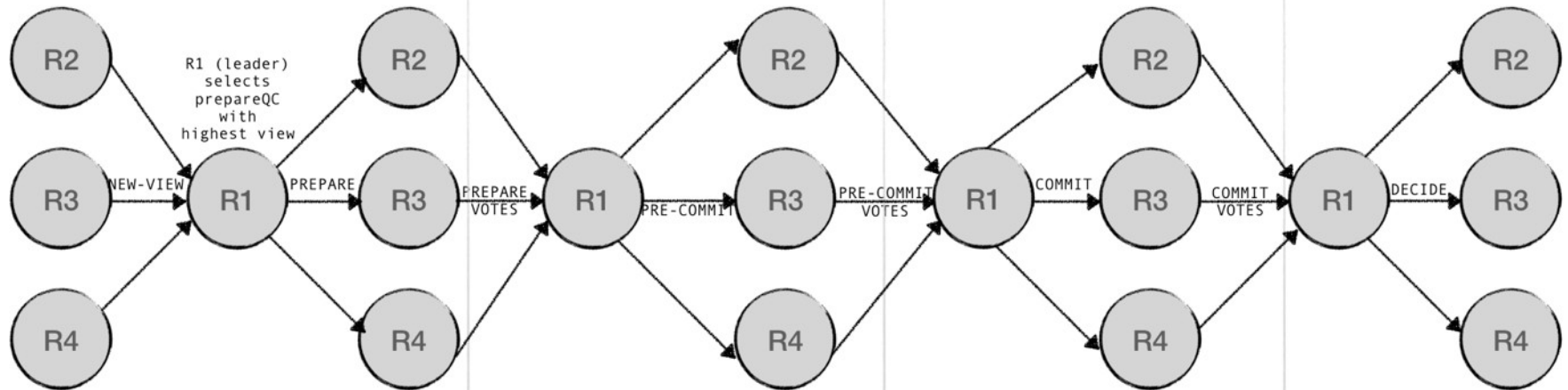


PREPARE

PRE-COMMIT

COMMIT

DECIDE



R1 (leader) broadcasts
Msg(prepare, curProposal , high QC)
R2,R3,R4 send
voteMsg(prepare, m.node , ⊥) to R1

R1 (leader) broadcast
Msg(pre-commit, ⊥, prepareQC)
R2,R3,R4 (replicas) send
voteMsg(pre-commit,
m.justify .node,⊥)
to R1

R1(leader) broadcast
Msg(commit, ⊥, pre-commit QC)
R2,R3,R4 (replicas) send
voteMsg(commit, m.justify .node ,
⊥)
to R1

R1 (leader) broadcast
Msg(decide, ⊥, commit
QC)
R2,R3,R4 (replicas)
execute & respond to
clients

Once a new leader has
collected new-view messages
from N - F nodes, the
protocol for new leader
starts

As soon the leader receives N
- F prepare votes, it creates
a quorum certificate (QC)
called 'prepare quorum
certificate'

When the leader receives N
- F pre-commit votes, it
creates a pre-commit quorum
certificate and broadcasts
it to other nodes as
the commit message

When the leader
receives N - F commit
votes, it creates
a commit quorum
certificate. This
commit quorum
certificate is
broadcast to other
nodes in
the decide message