

# Quorums in Detail (Contd.)

- $R$  = read replica count,  $W$  = write replica count
- Two necessary conditions:
  1.  $W+R > N$
  2.  $W > N/2$
- Select values based on application
  - $(W=1, R=1)$ : very few writes and reads
  - $(W=N, R=1)$ : great for read-heavy workloads
  - $(W=N/2+1, R=N/2+1)$ : great for write-heavy workloads
  - $(W=1, R=N)$ : great for write-heavy workloads with mostly one client writing per key