Ping Procedure

Handle Server Ping

Server Restarted or New Server

If Primary Restarted
    Promote Backup
    Viewnum ++
    ACKed = false
If Backup Restarted
    Viewnum ++
    ACKed = false

Handle ACKed

Very First Primary

Tick Procedure

Detect all servers especially is Primary Dead? Is Backup Dead?

If Acked

Primary Dead
    Promote Backup
    Viewnum ++
    ACKed = false
    return

Backup Dead
    Mark Backup as Dead
    Viewnum ++
    ACKed = false
    return

Choose Backup from idle servers
    Viewnum++
    ACKed = false

Else
    wait for Primary to ACK