Exercise Session 6
Non-Blocking Atomic Commit

November 8, 2010

Problem 1

Devise two algorithms that, without consensus, implement weaker specifications of NBAC by replacing the termination property with the following ones:

- weak termination: let p_i be some process; if p_i does not crash then all correct processes eventually decide;

- very weak termination: if no process crashes, then all processes decide.

Problem 2

Can we implement NBAC with the eventually perfect failure detector $\diamond P$ if we assume that at least one process can crash? What if we consider a weaker specification of NBAC where the agreement property is not required?