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.*

Look at the solution to Exercise 6.13 (page 324 of the new book).

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?

Look at the solution to Exercise 6.14 (page 324 of the new book).