LPE Reading Group
Thu, 12 April 2001

stratton.mae.cornell.edu
128.84.137.96

18.78.0.148
(MIT)
1) commit?
2) coordinator

GMS = Group Mem. Service
Pid = Process id
"view" = the list of all the members
of the group

fails

fail-stop model:
after the proc. fails it stops.
gossip protocol: detects failure by time-outs.

 operational
(3PC) extension of 2PC
2PC = two-phase commit

Coordinator:
phase I multicast: ok to commit?

Collect replies

all ok → send commit

else → send abort

If timeout → send “abort”

Participant:
ok to commit →

save to temp data, reply ok

commit →

make change permanent

abort →

delete temp area

Atomicity = if it happens everywhere or nowhere.

— atomic broadcast

Contact other participants to agree on the outcome if outcome is unknown then wait.
Next week: Matt will present routing

Tannenbaum, Networks, chapter 2.5

Distributed Algorithms
Nancy A. Lynch
Morgan Kaufman, 1996

Two weeks