Exercise Session 8
View Synchronous Communication

November 22, 2010

Problem 1

Give an algorithm that implements a view synchronous (VSC) abstraction such that a single consensus instance is used for every view change, and every process directly vsDelivers *every message it* vsBroadcasts *or after the process first learns about the existence of the message.*

Look at the solution to Exercise 6.16 (page 324 of the new book).

Problem 2

The TRB-based view synchronous algorithm presented in the class is non-uniform in terms of message delivery. Can you make it uniform by replacing Best Effort Broadcast *with* Uniform Reliable Broadcast*? Explain your answer.*

View Synchronous Algorithm 2 covered in the class answers this question, along with Section 6.8.4 (the new book). You cannot make *TRB* VSC algorithm uniform in terms fo message delivery, by replacing *beb* with *urb*, because then you may violate View Inclusion property.