

Distributed Systems – Fault Tolerance

Lab 3

2020/2021

State Transfer

Taking advantage of a group communication toolkit as an atomic broadcast protocol with group membership notifications:

1. Implement full state transfer to integrate new servers concurrently with client requests, taking advantage of total order.
2. Test with multiple servers and clients, removing and re-adding servers while clients are active.
3. Consider the possibility of incremental state transfer, by keeping a sequence of recent messages that can be replayed.

Learning Outcomes Recognize the importance of atomic group membership. Apply state transfer to recover servers in active replication.