Light Weight Randomized Reliable Multicasting Protocol

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Introduction
- Multicasting an efficient method of data dissemination
- IP multicasting protocols support best effort semantics
- Reliable Multicasting is required for critical applications that require guaranteed delivery
- **Tree based protocols**
  - Distributed recovery
    - Recovery shouldered by all members (RRMP)
    - Involve a trade off between recovery latency and buffer space utilization

Local Recovery in RRMP

Remote Recovery in RRMP
Local Recovery in LRRMP

Remote Recovery in LRRMP

Request Suppression

Uniform Packet Storage
- Probabilistically, at most one copy of a message is stored in a region.
- Nodes hash message sequence numbers to decide which messages to store.

Simulation Results - NS2

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References