The promise of distributed systems

The promise of distributed systems

- · Higher availability one machine goes down, use another
- Better durability store data in multiple locations
- More security each piece easier to make secure

The reality of distributed systems

Reality has been disappointing

- · Worse availability depend on every machine being up
- · Worse reliability can lose data if any machine crashes
- · Worse security anyone in world can break into system
- Coordination is more difficult must coordinate multiple copies of shared state information (using only a network)