

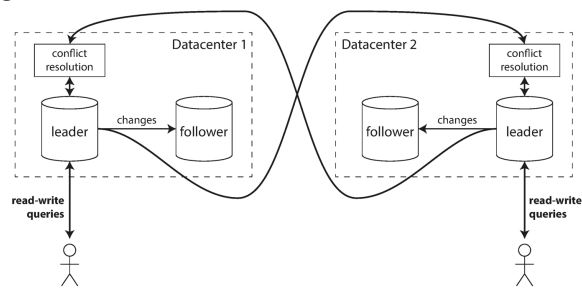
MULTI-LEADER REPLICATION

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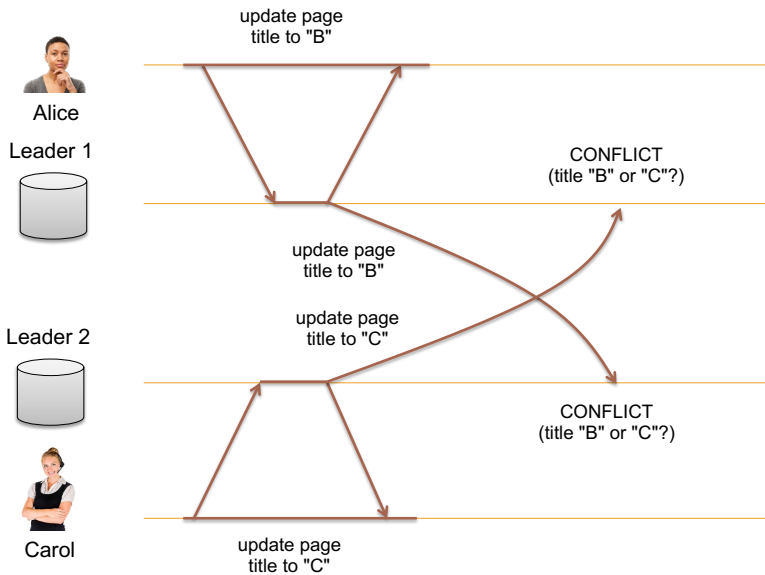
Use Cases

- Multi-datacenter operation
 - Latency
 - Datacenter outages
 - Network problems
- Offline operation
 - Mobile
- Collaborative editing



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Write Conflicts



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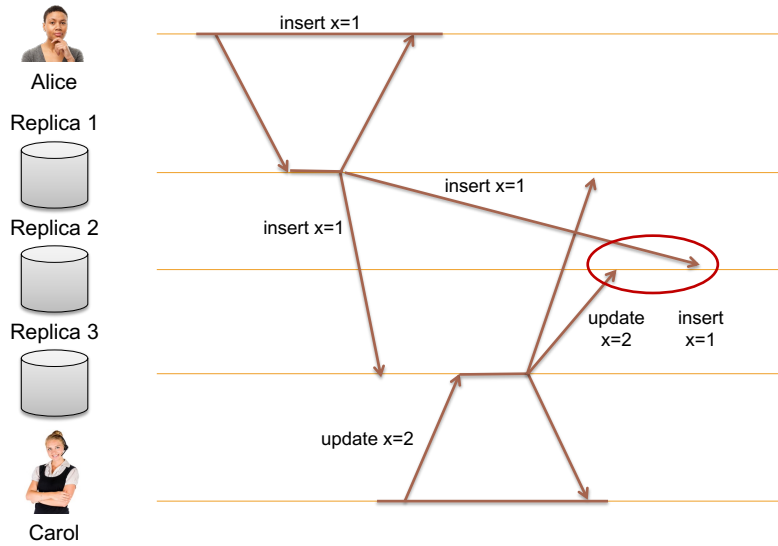
Write Conflicts

- Synchronous Conflict Detection
- Conflict Avoidance
 - All writes for a record to the same leader
- Convergent Conflict Resolution
 - Last Write Wins (LWW)
 - Highest numbered replica
 - Merge updates together
 - Custom conflict resolution

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Out-of-order Writes



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