

OCT Distributed Transactions

Notes adapted from Tanenbaum's
“Distributed Systems Principles
and Paradigms”

Hypothetical Web Service Transaction

Begin transaction BookTrip

book plane

book hotel

book rental car

End transaction BookTrip

Transactions (ACID)

- **Atomic:** All or nothing. No intermediate states are visible.
- **Consistent:** system invariants preserved, e.g., if there were n dollars in a bank before a transfer transaction then there will be n dollars in the bank after the transfer.
- **Isolated:** Two transactions do not interfere with each other. They appear as serial executions.
- **Durable:** The commit causes a permanent change.