



95-702 Distributed Systems

An introduction to Transaction Processing (TP) and the Two Phase Commit Protocol

Notes adapted from: Coulouris: Distributed Transactions,
Tanenbaum's "Distributed Systems Principles and Paradigms" and
Bernstein and Newcomer: Principles of Transaction Processing

Transaction Processing (TP) Systems

- One of the first was American Airlines SABRE – 83,000 transactions per day
- Became IBM's Airline Control Program
- Became IBM's Transaction Processing Facility (TPF)
- Many such systems exist:
- Oracle Tuxedo (Thousands of transactions per second)
- IBM's Customer Information Control System (CICS)
- Most databases and messaging systems provide for transactional support
- JEE and Microsoft .NET both provide extensive capabilities for creating and deploying TP applications

TP System Architecture

