CDSII: Revision
General architecture

Application

Middleware

Operating system

Where the action is
Middleware models

- RPC
- Object-oriented (OOM)
- Message-oriented (MOM)
- Event-based (EBM)
Essential internal middleware services

• time/causality
  • vector clocks, clock synchronisation, ...

• replica consistency management
  • quorum assembly, distributed transactions, ...

• group management
  • leader election

• mutual exclusion
Very useful services for the middleware to provide

- naming
- find objects that constitute the application
- access control
- determine who can do what when under which circumstances
- storage
- transient doesn’t last forever