Why distributed?

- Systems are distributed
  - Networked embedded systems
  - Ad-hoc communication systems
  - Enterprise information systems

- Distributed execution
  - For performance reasons
  - For IP protection reasons
Three Approaches

- Publish and subscribe approach
  - Data sharing
  - Joining and leaving a federation
- Remote Actor Proxy (RAP) approach
  - Distributed execution mediated by wrappers
  - IP protection
- Distributed hierarchical heterogeneity
  - Distributed infrastructure that preserves MoC
  - Services for MoC
    - Receivers
    - Directors
    - Composite Actors

Publish and Subscribe

JSpaces
Remote Actor Proxy Approach

Distributed Infrastructure