Protocol Mechanisms: An Approach

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Functionality

- Agent Discovery
- Locator Acquisition
- Arc Formation
- Map Query, Map Distribution
- Association Query, Association Update
- Path Setup
- Neighbor discovery

Agents

- Entity Representative
- Association Agent
- Map Agent
- Forwarding Agent

Mapping Functionality to Protocols

- Query-Response Protocol
  - Association Query
  - Map Query
  - Locator Acquisition
  - Map formation
- Update Protocol
  - Association Update
  - Map Update
  - Agent Discovery
- Path Setup and Teardown Protocol
  - Path Setup
- Neighbor Discovery Protocol

Approach to Protocol Design

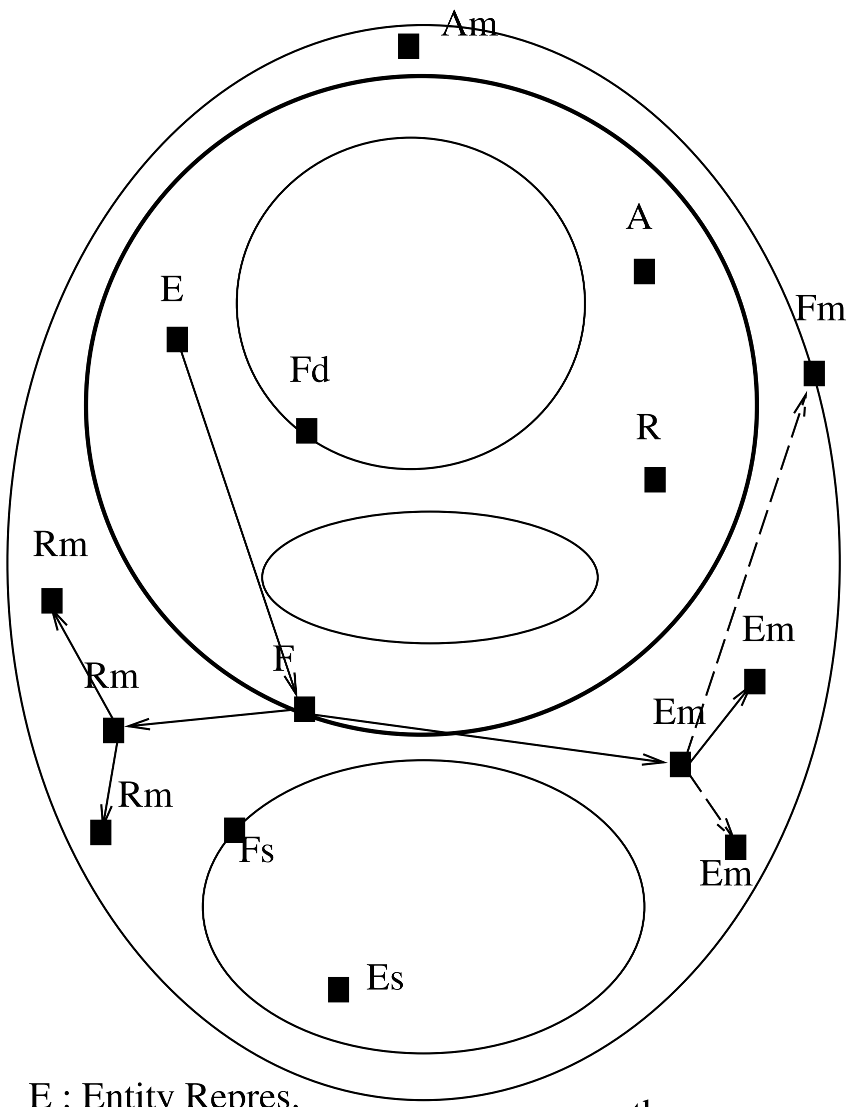
Agent Interactions

- Interactions with agents of the same level
- Interactions with agents of the “mother” node
- Interactions with agents of the “daughter” node
- Interactions with agents of the “sister” node

Protocol FSMs

- States
- Actions
  - Not only *what* the input message is
  - but also *who* it came from

An Example : Map Update



E : Entity Repres.
A: Association Agent
F : Forwarding Agent
R : Route Agent

m : mother
d : daughter
s : sister