2007 ART Testbed Competition

Discussion Meeting
May 16, 2007
Honolulu, Hawaii, USA
Discussion Plan

• Feedback
  – Testbed v1.0
  – 2007 Competition Logistics

• Future Direction
  – Testbed Improvements
  – Competition Organization
Feedback

• Increase population size good

• Changing expertise
  – Don’t have all change at the same time
  – Probabilistic change, requires more rounds, more timesteps
  – Gradual changes over time (becoming better/worse), perhaps proportional to number opinions generated

• System size, interaction opportunities; need to facilitate reputation exchange (relationship between opinion cost, system size)
Feedback: Logistics

• Competition and symposium?
  – Run competition remotely (December?)
  – Workshop discussion/publication opportunity (May/AAMAS)
Problems

• Ontologies for reputation
  – How is reputation communicated/interpreted?
• Studying barriers to entry; how a new agent joins an existing MAS
• Effects of collusion
• Multiple agents sharing trust models (not necessarily cooperating)
• Privacy and attacks
• Peer-to-peer problems, varying network topology
• Reputation propagation through network
Improvements for Future

• More competitive dummy agents
• Create a task list for encouraging contributions, system for submitting improvements
• Designing agents documentation: beware of generating “free” opinions
• Relationship between opinion generation cost and opinion accuracy
• Peer-to-peer perspective, varying network topology