Conducting Business Via P2P

Introduction

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P2P Computing

- Heavy interest in practice and research
- Visible successes
- An obvious (to a multiagent systems researcher) approach for organizing distributed computations
P2P Computing Limitations

- Predominantly, a consumer or hobbyist focus
- Popular techniques seem to
  - Be hard-coded to specific applications
  - Violate autonomy: distributed hashing
  - Violate heterogeneity: all sites run the same algorithm
Potential Scenarios in Open systems

- Data management
- Cross-enterprise business processes
- Service discovery and selection based on QoS
- Achieving trust and resisting threats
- Monitoring and compliance

How to get P2P into mission-critical applications?
Themes and Questions

- What are some challenges and pitfalls in
  - Modeling?
  - Methodology?
  - Evaluation of above?
  - Performance?

- What do agents bring to the table?
  - Can agents simplify bootstrapping a system?
  - Is self-organization essential?
  - How do agents relate to P2P middleware?
Panelists

- Sonia Bergamaschi
- Hector Garcia-Molina
- Sandip Sen
- Steve Willmott