

## Panel 1: Collaborative Computing: Killer Applications & Future Perspective?

---

Moderator: **Ling Liu**, Georgia Tech, USA

### Outline of the Panel

---

- Introduction to Panelists
  - **Dimitrios Georgakopoulos**, Telcordia
  - **Le Gruenwald**, NSF CISE IIS
  - **Steven Poltrock**, Boeing Phantom Works
- Collaborative Computing: Where are we?
- Introduction to Panel Questions

## Collaborative Computing: Why now?

---

### The world of Computing is Changing

- Hardware gives us more choices than ever before
- Cost of labor is rising
- Data volume is exploding
- Content Delivery paradigms is evolving [Saroiu+OSDI-02]
  - Web vs. CDN vs. P2P v.s. Wiki/Online communities
- Customers (both business and scientists) want integration and FAST access to the data they want
- Users driven and Usage driven

3

## Three Panel Questions for Discussion

---

- **Question 1:** What is your vision on collaborations in computing?
  - Example: Are all distributed systems collaborative systems?
    - key properties that distinguish collaborative computing networks, systems, and applications from other types of distributed systems
- **Question 2:** How distribution, service oriented computing play a role in promoting and enabling collaborative computing?
- **Question 3:** What are the important research challenges for collaborative computing vision to be successful and have an impact?

4

## Panel Organization

- **Moderator (5 minutes)**
  - Introduce panelists
  - Opening the panel and establish context for the panel
  - Raise three important questions for panel discussions
- **Panelists (~15 minutes each, 50 minutes total)**
  - Each panelist presents his/her position statements regarding the three panel questions from his/her expertise
- **Open Floor for Panel Attendees (30 minutes)**
  - Questions and comments from attendees
- **Closing Remarks (5 minutes)**
  - The panel moderator will summarize the panel discussion
  - each panelist to give one take home message from the panel.

5

## Global Collaborative Computing

- Large scale distributed systems that are built over a wide area overlay network
  - to support geographically distributed user communities
  - to enable pooling of distributed resources
  - to perform computing tasks through distributed collaborative worksharing
- Two Popular Systems Approaches
  - **Grid Computing** (controlled overlay)
  - **Peer to Peer Computing** (unregulated overlay)



[picture courtesy of J. Kubiawicz]

6