

Distributed Systems and Applications

Co Chairs

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Progress so far...

Conceptual design documents

- <http://www.geni.net/GDD/GDD-06-07.pdf>
- <http://www.geni.net/GDD/GDD-06-08.pdf>

Town hall meetings

- March - Washington
- May - Chicago
- June - Snowbird

Topics

- (1) Applications and opportunities
- (2) Requirements and issues

Identified Goals and Opportunities

Properties

- Wide spread deployment
- Diverse networks and HW
- Support for real user traffic

Infrastructure services

- Monitoring
- Data distribution
- Cyber security
- Resource allocation
- Pub/Sub, CDN
- ...

Distributed applications

- Email/storage/... "in the cloud"
- Emergency response
- Mobile user support
- Sensors
- E-science svcs
- ...

Identified Issues/Requirements

Resource Diversity

- HW: Cycles, memory, disk, bandwidth (internal, public Internet, wireless), clusters, high-end servers, geographic distribution, embedded devices, ...
- SW/Services: Time, distributed FS, tutorials, experiment mgmt, monitoring data + repository, tools for "real users/applications" to opt in, ...

Resource Allocation

- Short term v. long term, small scale v. large
- Guaranteed QoS v. best effort + monitor
- Multi-slice systems
- Pricing/incentives schemes v. peer merit review

Breakout Agenda

- Identify opportunities/applications

What experiments are enabled by infrastructure?

- Help “sell” proposal
- Drive design

- Identify/prioritize requirements

How to improve current plan?

- HW
- SW
- Services