Workshop Description

- Grids
  Grids, decentralized collections of heterogeneous resources supplemented with usability middleware, are emerging as an attractive platform for achieving high application performance. This workshop provides a forum to report performance characteristics of grids and grid applications. It covers benchmarks for measuring grid performance and partitioning methods for adaptation of applications to the grid platform.

- Benchmarks
  Grid measurement technology is necessary for evaluating performance of grid hardware and middleware. Specifically, grid benchmarks provide a basis for measuring the grid performance characteristics such as computational efficiency, communication speed, scheduler efficiency, programmability, and scalability. The issues of repeatability of measurements and resource utilization tracking make grid benchmarking more complicated than traditional supercomputer benchmarking.

- Partitioning
  Partitioning of applications for efficient use of grids is an emerging area of research. Applications that can exploit grids range from parameter-space studies, Monte Carlo simulations, to graph-based applications and multi-physics coupled models. Currently, grid core middleware such as Globus does not provide a service for partitioning. On the other hand, existing partitioning tools are not well suited for grids. Partitioning applications for computational grids aims at achieving high performance of existing applications on grids.

Topics

- Measurement Tools for Computational Grids
- Grid Practice
- Grid Benchmarking
- Partitioning for Computational Grids

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