IEEE MTAGS 2010
3rd Workshop on Many-Task Computing on Grids and Supercomputers
co-located with ACM/IEEE SC10 (International Conference for High Performance, Networking, Storage and Analysis), New Orleans, Louisiana -- November 15th, 2010

The 3rd workshop on Many-Task Computing on Grids and Supercomputers will provide the scientific community a dedicated forum for presenting new research, development, and deployment efforts of loosely coupled large scale applications on large scale clusters, Grids, Supercomputers, and Cloud Computing infrastructure.

Topics
Compute Resource Management
- Scheduling
- Job execution frameworks
- Local resource manager extensions
- Performance evaluation of resource managers in use on large scale systems
- Dynamic resource provisioning
- Techniques to manage many-core resources and/or GPUs
- Challenges and opportunities in running many-task workloads on HPC systems and Cloud Computing infrastructure

Storage architectures and implementations
- Distributed file systems
- Parallel file systems
- Distributed meta-data management
- Content distribution systems for large data
- Data caching frameworks and techniques
- Data management within and across data centers
- Data-aware scheduling
- Data-intensive computing applications
- Eventual-consistency storage usage and management

Programming models and tools
- Map-reduce and its generalizations
- Many-task computing middleware and applications
- Parallel programming frameworks
- Ensemble MPI
- Service-oriented science applications

Large-Scale Workflow Systems
- Workflow system performance and scalability analysis
- Scalability of workflow systems
- Workflow infrastructure and e-Science middleware
- Programming Paradigms and Models

Large-Scale Many-Task Applications
- High-throughput computing (HTC) applications
- Data-intensive applications
- Quasi-supercritical applications, deployments, and experiences

Performance evaluation
- Real systems
- Simulations
- Reliability of large systems

Important Dates
Abstracts Due: September 15th, 2010
Papers Due: September 15th, 2010
Notification of Acceptance: October 15th, 2010
Camera Ready Papers Due: November 1st, 2010
Workshop Date: November 15th, 2010