UNIVA UD

Sun Partner Advantage

SC08 Workshop:
How to Migrate from LSF to UniCluster with SGE

November 17, 2008 • 9:00AM – 2:00PM (lunch provided) **• Marriott Downtown • Austin, TX**

High-performance computing (HPC) over the past few decades started with a few supercomputing systems vendors who drove innovation through engineered performance and tight integration. As commoditization spread across the stack enabling the use of commodity components, the distributed resource management (DRM) middleware expanded from a single batch system NQS (Network Queuing System) to a wide range of incompatible choices: Sun Grid Engine (SGE), Portable Batch System (PBS), Load Sharing Facility (LSF) and Load Leveler to name a few.

Herein lies the basis of the problem: What could be considered the most essential piece of HPC software, the resource manager, is incompatible with virtually every aspect of alternative offerings. Moreover, organizations seeking an alternative are quick to find the challenges presented by many migration projects.

Tools & Takeaways

All attendees will receive:

- **LSF 2 SGE Quick Reference Guide**, with SGE commands for all major LSF commands plus a full page on job submission
- **SGE Beginners' Guide** for those who are new to Sun Grid Engine

Join us for an educational session that will include detailed presentations on how to plan and manage a migration project. This invitation-only workshop will preview the output of the OHMI project including a 'cookbook', detailed discussion of the differences between DRMs, and an open discussion and Q&A session.

Why attend? To access valuable tools and knowledge about migrating from LSF to a more cost-effective and complete UniCluster environment.

Session speakers include:

- **Bill Bryce**, Director of HPC Products, Univa UD
- **Stephen Dennis**, Senior Software Engineer, Univa UD
- **Dan Templeton**, Sun Grid Engine Product Team

Agenda Overview:

- **Introduction**
  - Presenters and participants
  - Goals of this workshop
  - Challenges moving from LSF to SGE
  - Methodology
- **Migration Planning**
  - Current cluster and application inventory
  - Testing cluster
  - Cluster migration scenarios
  - Cluster hardware sizing
  - Migration checklist
- **Key Evaluation Criteria**
  - Scheduler performance, cpu & memory usage
  - DRM scalability
  - DRM failover
  - DRM startup/restart time
  - DRM job overhead and failure/auto restart
- **Installation, Configuration & Management**
  - The need for UniCluster
  - New or existing cluster?
  - Cluster provisioning
  - Cluster update
  - Cluster operations
  - Cluster monitoring & events
  - Cluster configuration management
  - DRM reporting
- **Migrating Users**
  - Script migration tools
  - End user training
  - Novice and expert users
- **Migrating Applications**
  - Existing SGE application integrations
  - Application migration professional services
  - Migration tools and documents
  - LSF to SGE Migration Reference
  - LSF to SGE on UniCluster Migration Cookbook
  - LSF to SGE Quick Reference Guide
- **Open Discussion Forum**
  - Discuss migration methodology
  - Participant Q&A session

*"Our users didn't even notice the difference when we replaced [Platform] LSF with UniCluster. **The product performs the same as LSF but at a reduced overall cost**. In addition, with UniCluster we have access to a full, integrated cluster stack. That goes beyond what a scheduler alone can provide." – Top Global Pharma*

Who should attend?

- **HPC Infrastructure Owners** interested in accessing the tools and information necessary to migrate to a more flexible and cost-effective computing environment
- **IT Decision-Makers** exploring ways to reduce cluster license and maintenance computing costs while ensuring production performance

Register Today

Attendance is limited and by invitation only. To register contact us at:

- migration@univaud.com
- 512-692-4118