

Joint User Admin Forum

OSG AHM, March 2, 2009

Objectives

- Get OSG site admins and OSG users to share perspectives on grid computing
- Filter HEP and non-HEP issues
- Identify important issues
- Agree on ways to make grid computing run more smoothly

Outline

- Grid Standards and Interoperability
 - Where do people stand *vis a vis* standards and interoperability?
- Admin Soap Box Session
 - Admins share observations and issues they have with OSG and user jobs
- User Soap Box Session
 - Users share experience of using OSG and running jobs on sites
- Important themes
 - Derived from soap box sessions
- Advanced topics
 - MPI, Workflows, Virtualization, Persistent Storage
- Summarize
 - “How to improve OSG in 2009 for everyone”

Admin Soap Box

- Who:
 - Shreyas, NERSC, MPI
 - Wants to support MPI users getting jobs running
 - MPICH, OpenMPI
 - No common job characteristic 2-1000 nodes, 5 minutes-8 days.
 - Common MPI applications could be compiled once by local sys admins
 - Mats: Documentation available to tell sites how to configure to advertise MPI capability
 - Jeff: Manual process via RSL to get MPI setup for jobs at Purdue
 - Action: Find a few users to try NERSC and Purdue OSG MPI
 - Steve/Jeff CCR:
 - Expectations: time taken to get onto Grid
 - User registration process, external CCR users, run jobs mostly at CCR
 - MPI: interface between user MPI script and grid/cluster MPI submission

User Soap Box

- Who:
 - Joel D0
 - Use of SEs to store job results helps significantly
 - Definition of "error" needs consideration (e.g. jobs run multiple times at Caltech with different exit codes)
 - Britta LIGO
 - WS-GRAM – first users in production, some stability issues (need to restart container)
 - Different sites with different GRAM versions
 - Tied to GT-4 for historical reasons (D-Grid), not all GT4 functionality available at OSG sites
 - Igor: Made case for installing glideinWMS
 - Steve Clark, nanoHub
 - Runs on TeraGrid and OSG, probes all sites every 30 minutes
 - Jobs cancelled after 18 hours in queue, monitors turn around time (submission to completion)
 - Reports and historical information available online
 - Ian Fisk, CMS
 - monitors all CMS sites every 2 hours
 - need for overlay (pilot job) well established – why not officially supported by OSG?

Way Forward: OSG in 2009

- Pilot job mechanism
 - Can this be standardized? LIGO, SBGrid, others? Panda, glideinWMS
- VO-specific job monitoring
 - done by CMS (every 2 hours), nanoHub (every 30 minutes), and others
 - templates for monitoring jobs to be used by any VO
- SE utilization by non-HEP users (and sites)
- Support/Documentation
 - too many sources, few clear (or consistent) answers