

SWT2-UTA

OSG AHM 2016

Contents

- Network Upgrades
- Software Upgrades
- Equipment Replacement
- Benchmarking Activities
- New Capabilities
- Operational Issues

Network Upgrades

- UTA placing Tier2 into Science DMZ
 - Being done as part of new border implementation
 - Border routers are MX960's (three places)
 - DMZ portion is funded through NSF CC*IIE grant
 - Frustrated by progress from OIT (Office of Information Technology)
 - DMZ will initially offer 20 Gb/s connectivity through OTS (UT-System) network
 - OTS network connection not shared with general campus traffic
 - LHCOne is waiting on this to be complete
 - DMZ router and peering with ESNET (in Chicago) is in place
 - Waiting on services in DMZ and firewall configuration to be put in place

Software Upgrades

- Looking to update OS / ROCKS / OSG
 - OS will move to latest SL 6 release
 - Rocks will move to version 6.2
 - OSG will move to OSG 3.3
 - Will be rolled out in one upgrade after testing

Equipment Replacement

– UTA_SWT2

- Added memory to UTA_SWT2 nodes (R410's)
- 16 job slot machines now have 32 GB
- Offers more single core slots, better utilization, eventually reduced network cost

– SWT2_CPB

- Not expecting major replacements in this center this year
 - Failure rate of 2TB disks could impact this but we have spares
- Additions expected (closing out FY15 funds)
 - 600TB of disk will come online after OS upgrades
 - We have submitted an order for 30 compute nodes (R630)

Benchmarking Activities

- Ran HEPSPREC06 on machines with added memory at UTA_SWT2
 - Did not result in significant change in machine score
 - No significant increase in overall HEPSPREC for the cluster

New Capabilities

- I/UCRC Center in Energy Efficient Systems
 - Studies (among other things) data center cooling
 - Received hardware donation from Yahoo
 - 450+ servers
 - Varying ages and capacities
 - Working with with CSE to setup computing services
 - Cloud based system
 - Looking at making this a opportunistic production site

Operational Issues

- Retirement of PRODDISK (still defined in ToA)
- Should there be definitions of HIMEM queues and beyond
 - 3 GB / core = HIMEM
 - 5+ GB / core = XHIMEM
 - How big is the demand for these queues
 - Any historical data?