RHUL Site Report

Govind Songara, Tom Crane

HEPSYSMAN @ RAL 30 Jun 2011



Contents

- Staffing & computing
- Tier2 Cluster
- Tier2 Network
- Tier3 Cluster
- Transitions to CC services
- Summary



Staffing & Computing

- Tom Crane (sysadmin 0.5 FTE) Joined on 1st April
- Govind Songara (Grid site admin)
- Simon George (System manager)
- Barry Green (Hardware & network support)
- Maintaining usual local systems & services
 - ~ 20 Desktops (SLC5), ~40 laptops (Win/Mac/Linux),
 Windows TS, printers (HP/Lexmark)
 - Network and firewall, Wifi
 - Nagios/Ganglia, DHCP/PXE/kickstart, Cobbler DNS, email
 - TWiki, web, SVN(accelerator group), elog, etc.
 - Videoconference suite



Tier2 cluster







Tier2 cluster

Upgraded in May 11

- Node ~ 10 Dell C6100 ~ 480 cores ~ 13.3 HEP-SPEC06 per core
- Storage ~ 21 Dell R510 ~ 24
 TB

Alces services

- Chose Alces software stack over CV's BCM
- cluster integrations, network switch replacement, installations etc.
- Very much satisfied with support



Total Job slot: -400+480 = 880HEP-SPEC06 = $\sim 3160 + 6384 = 9544$ Total Storage: $-\sim 300 + \sim 400 = \sim 700$ TB



Tier2 Network

Separate subnet

- 134.219.225.0/24
- Plan to setup dedicated monitoring like cacti etc.
- Dedicated 1Gb/s link to Janet at IC
- Until April shared the link with college, which was capped at $= \sim 300 \text{ Mb/s}$
- Network Hardware upgrade
- 8x Dell PowerEdge 6248, double-stacked (2x48Gb/s + redundant loop)
- SN: 4x1Gb/s bonded & vlan, WN: 2x1Gb/s bonded (only on private network)





Tier3 Cluster

- For local use:
 - Atlas analysis, pheno
 - Accelerator simulations (MPI)
- Provisioning:- Cobbler/local postinstall and plan to integrate with Puppet
- Torque/maui, MPI
- Plan to install CVMFS for atlas software, local squid
 - Upgraded 54 nodes out of 75 :
 - AMD Phenom II 955 3.2GHz, (4 core) + AMD Phenom(tm) II 1090T 3.6GHz (6 core) + 8GB RAM
 - Total slots:- 232





Transitions to CC services

- Due to funding constraint
 - Migrating services that are replicated centrally
 - So far migrated email system , offsite backup for home
 - Plan to move DNS, window terminal servers
- Future major procurement will be via CC
- Reviewed what can be done by CC
 - Wifi, twiki, RHEL5 VMs, NAS, virtual desktops etc
 - Benefit from their economies of scale
 - Reduce HEP sysman effort



Summary

- Reduced funding ~= less staff ~= do more
- Expecting additional link to improve network performance.
- Migrating most of services to CC wherever possible

