Cambridge Site Report

HEP SYSMAN, RAL

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UNIVERSITY OF CAMBRIDGE

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Man Power:

For Group

- John Hill – the main sys-admin
- Steve Wotton – deputy sys-admin
- Kavitha Nirmaladevi (half-time)
- Around 1.2FTE of effort (part of Steve and John)

For Grid system

- Just myself

Group System:

Hardware/OS

- Around 70 desktops (roughly 2:1 Linux:Windows)
- Mainly SLC-5.5 and Windows XP (still some SLC4 desktops)
- Servers are SLC4 at present, serving ~27TB of storage

Present Work

- 18TB of clustered storage to replace ~7TB of the old storage mentioned earlier
- Migrating from Windows 2000 to Windows 2008 domain
- Buy ~35TB of storage for LHC n-tuple (and equivalent)

Group System:

Network

- Gigabit backbone with a 1Gbps connection onto the University network
- 10Gbps (??) University connection on to JANET

Future Plan

- Nothing big
- Buy ~35TB of storage for LHC n-tuple (and equivalent)
- Traffic levels are rising and we may be forced to consider a upgrade

Grid Status [hardware]:

Head nodes

- Dell PE-1050s (quad-core/8Gb) for CE, SE and UI

Worker nodes

- 33 x Dell PE1950 (2*dual-core 5150 2.66GHz; shared with CamGrid)
- 4 x Viglan (2*quad-core E5420 @ 2.50Ghz)
- 4 x SunFires (2*quad-core L5520 @ 2.27GHz)
- 4 x Dell R410 (2*quad-core E5540 @ 2.53Ghz)

Storage

- 108TB online (~100TB reserved for atlas).
- ~30TB being used by local project; will be added to the grid soon.

Grid Status [middleware]:

- gLite 3.2 for the WNs.
- gLite 3.1. for MON and UI.
- gLite 3.2 for the CE, SE, site-BDII.
- DPM v1.7.2 on the head node.
- DPM v1.7.3 on of the DPM disk servers
- XFS file system for the storage
- Condor (v7.2.4) is used as the batch system.
- Supported VOs: Mainly Atlas, LHCb and Camont
- Additional VO support: Alice, Biomed, Calice, CMS, dteam, euindia, gridpp and obviously ops

Grid System:

Network

- Gigabit backbone with separate 1Gbps connection onto the University network
- All the WNs are on the gigabit-network
- 10Gbps (??) University connection on to JANET

Future Plan

- Nothing big
- Buy ~35TB of storage for LHC n-tuple (and equivalent)
- But traffic levels are rising and we may be forced to consider a upgrade

Grid System [issues]:

Network

- Middleware is too buggy for Condor
- No proper/practical support, yet
- All the previously written scripts are almost no longer maintained
- Most of the "info-provider" scripts rewritten /modified locally
- Every new release breaks the condor-glite integration
- Cannot use yaim on CE
- Spending too much time on fixing glite scripts rather trying new things.
- GridPP4 money, of course.

Grid System [plans]:

Network

- Upgrade Condor
- More job-slots and disk space
- Condor on Cream-CE
- Install Scas,glexec

Questions??

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