

Local and Grid Computing Status

Group Meeting, 8th September, 2016
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Birmingham Tier 2 Grid Site

Grid site running ATLAS, ALICE, LHCb and 10% other VOs

The Birmingham Tier 2 site hardware consists of:

- 1600 cores across 68 machines at two campus locations
 - ~830 TB of disk, mostly reserved for ATLAS and ALICE

Status of the site:

- Things going smoothly overall
- We've had to retire a couple of the very old disk chassis's and workers

Future plans and upcoming changes:

- Replace CREAM and Torque/Maui with ARC and HTCondor
- Get some IPV6 address from central IT and start some tests



Local Systems Overview

Over the last 6 months there have been a number of changes to the local system

The current state of what we have is below:

- Batch Cluster Farm, 8 nodes, 32 (logical) cores, 48GB per node
- 180TB 'New' Storage + 160TB 'Older' Storage + 160TB 'Oldist' Storage
 - Fedora 22+23+24 Desktops
 - SL5 and SL6 images •
 - Two F22+F24 login nodes
 - Two Web servers •
 - DHCP, Mail and LDAP servers •

Please let me know if anything is missing/not working or there's some software or service that you want!



Mass Storage Change - MooseFS

After many months of trying to get Lustre to play nicely with Fedora, I've given up and found (what I think!) is a much better distributed FS

The benefits of this filesystem are:

- Doesn't need hardware RAID as redundancy is built in •
- Can use any and all disks available extending disk/chassis life greatly
 - Native client for all RHEL based OSs (i.e. Fedora and SL)
 - Much easier to administer can easily see any problems
 - It has a cool name

The filesystem can be found at /disk/moose across all systems

I'm in the process of shifting all current data to moose from the old disks and then adding those to the pool

Please review your data use in the old disks and move/delete this as appropriate!



General Updates

Desktops:

- **Gradually upgrading to Fedora 24**
- VirtualBox available to those that want access to Windows
 - Plan to have CC7 as an image available soon

Laptops:

Now have 3 group laptops available running Windows 10

New Hardware:

- About to take delivery of the next generation of desktops
- The new storage node part bought through Miriam's Grant is working
 - Currently no plans to get more workers or storage
- Does anyone need any other specific computing hardware? e.g. GPUs...



Printers Update

The university in its infinite wisdom is introducing a Managed Print Service which it will be mandatory to use

What this will mean is:

- You can print to a general University queue and then print from any printer on campus
 - You can print from ∼any device •
 - You will need to give your ADF username and password •
 - You will need to swipe your university card at a printer to actually print something
 - We will be getting new MFDs to replace our current printers •

The current system will stay in place for some time but we won't be able to buy more ink

soon

As soon as we have printers in place, I'll setup the client on the desktops for people to start using