

Birmingham site report

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Desktops

- 58 user-desktop PCs running Linux
 - Recent PCs are 3.2 GHz, 1 GByte RAM, running Scientific Linux 3.
 - New PCs planned to be AMD dual-core
- 4 user-desktops running Windows XP
- 12 PCs in labs running whatever experiment requires: Windows or Linux

Linux desktop configuration

- All Linux desktops are loaded via Kickstart from a local mirror NFS server
- %post processing script does *yum update* and hardens the system before its first boot
- Configuration is then done (and afterwards maintained) using rdist via ssh with one distfile
- The rdist distfile has ~200 lines updating files/directories or invoking action scripts

Linux customisation

- A few unwanted packages if you install **Everything** with Scientific Linux 3
- Worth suppressing in the kickstart
- See <http://www.ep.ph.bham.ac.uk/general/support/rhel3custom.html>
- Some other bits of experience listed there for desktop use of ScientificLinux/RHEL

Farm hardware

- Alice Farm: 18 dual 800 MHz PC boxes
- BaBar Farm: 120 dual 800 MHz blades
 - *now includes Bristol and QMUL Babar Farms*
- Atlas Farm: 38 dual 2.0 GHz blades
- 50% of Atlas Farm and a few nodes of BaBar Farm are for local use on SL3
- 50% Atlas and 90% BaBar farm running LCG 2.7
- 8 nodes of B.F. running a Pre-Production Service

Laptops

- 10 laptops in a group Pool
- ~10 user laptops (mainly students)
- All laptops are behind an extra level of 'firewall' to the outside world

Servers

- Linux servers running SL3 and SL4
- Recent file-servers running CentOS-plus kernel (with XFS support)
- Citrix Windows Terminal Server(s) for those required MS applications.

RAID configuration

- Recent RAIDs delivered preconfigured with theoretical reliability of 99.950% per annum only – not good enough ✘
- Reconfigure with spare and more groups to reduce effective rebuild time and so increase mean time to data loss
- Reconfigured reliability 99.999% pa ✓

Networking

- Gigabit to the newer servers, 100Mb/s to desktop (but gig interfaces on our new PCs)
- 2 Gbits/s for the dept to rest of campus
- Campus firewall adopting default-deny policy, but Physics has its own firewall
- Connection on campus to UKLight has been delayed but should happen “soon”

The Grid

- UK Front-ends hosting CE, MON and SE and a second CE for BaBar farm
- Storage is ~2 TB: further RAID unit planned for August
- Standard nodes run SL305 with LCG 2.7.0
- Pre-production service on 8 nodes
- pxe-boot/kickstart installation using yum/yaim
- + some steps to finish off configuration (nfs, cron.allow, ganglia,...)