# Glasgow Site Report

A. Pickford



## Desktops/Laptops



### Desktops

- ~ 50 'front line' desktop/lab pcs + 30+ older pcs
- either SL4 (a few SL3) or WinXP
- current spec 2 GHz dual core cpu, 2 GB ram (4GB next purchase)
- unattended install (kickstart) for SL4 + cfengine configuration

### Laptops

- ~ 40 laptops
- various types, specs and OSes (linux, windows & macs)
- 'standard' installation dual boot SL 4 & WinXP



# Batch System

9 Dell PowerEdge 2650 nodes



- dual 2.4 GHz Xeons, 4GB ram
- torque/maui
- scientific linux 4
- on/off usage pattern either fully loaded (30%) or nothing
- nearing end of useful life
- Replace with ~6 quad core Xeons in next 6 months



## Servers 1

### Storage

- 2 new storage machines
  - 48 x 1TB discs each
  - total of ~ 72 TB usable storage (RAID 6)
  - 3ware 9650 raid controllers
  - SLC 4 (xfs filesystem)
  - exported via nfs and samba

#### Servers

- SL4 + windows server 2003
- authentication via nis (and samba for windows)
- windows terminal server





## Servers 2

- web (apache), printing, monitoring
- 'external' web pages moved to university t4 service
- internal pages/wikis retained
- backup
  - nightly backup schedule to disc
  - using dirvish
  - limited to user home areas (20GB/user)
  - retained for 7 days except
    - Saturday backups retained for two months
    - first monthly Saturday backups retained for six months

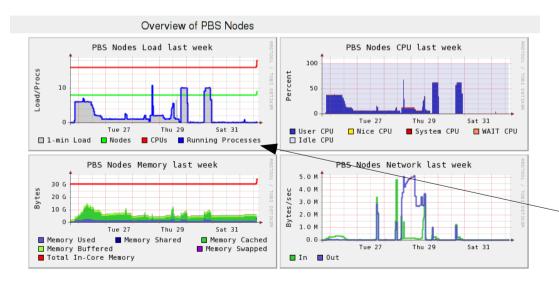


# Monitoring 1



nagios - fault detection and notification

3ware 3dm tools + nagios to monitor and email alert on raid disc failure



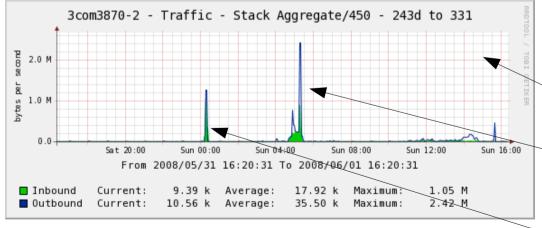
ganglia – usage monitoring

Batch node usage



## Monitoring 2





cacti – network traffic monitoring

group network backbone usage (over a weekend)

backups

SL4 package updates



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### **Tier 2.5**

- integrate new storage with local ScotGrid machines
  - allow grid jobs to access local group storage
  - security issues
    - nfs
    - group files typically world readable
    - literally world readable via the grid unacceptable
      - only grid certs mapping to local users to be able to read files
    - grid compromise → potential back door to group/department systems
      - group storage machines on private grid subnet
      - allow only nfs to/from grid to group machines



### **Future**

- move to new machine room in 2009
- replace batch system
- move backup machine out of departmental building
- Tier 2.5

