A view from the deep end!

(Confessions of a Newbie Cluster Administrator)

David Green
Research Computing Services
Griffith University
64 Toys

- Sun Microsystems V20z
  - Dual Opteron 252,
  - Dual Disk,
  - Dual Gbit NIC
  - Linux-based Service Processor
- A production system
- A development system
- A IIS web hosting service
- A self-fulfilling prophecy
Positives

- Had a great tutor
- Good models for production HPC clusters at Griffith, QPSF and APAC
- Good encouragement for doing the job right (ITIL shop)
- Able to make good use of Service Processor capabilities to manage and monitor the nodes from behind
- PXE + TFTP + KickStart clean installs of FC3
- Finally went into serious production last Fri.
Negatives

- “Have the person responsible for acceptance testing involved at an early stage”
  - Changing requirements
  - Wheel re-invention
- Occasional electrical power outrages
  - Did I mention that my office is 65 km up the motorway from the reset buttons?
Neutrals

- LDAP Auth and NSS over TLS to eDirectory
  - SLES9 = TRUE
  - Solaris 9 = TRUE
  - FC3 = FALSE

- Wrote a parser to pre-include %includes into KickStart configs (now everything is an %include)

- Wrote a stats cruncher to create mean/max/min sar data for bunches of nodes and treats them as one in RRD+cricket.
Wannas

- VServer looks very promising!
  - Will be turning 16 dual nodes into 32 singles
  - Running 32-bit Novell eDirectory on the gw node

- Do more with Nagios+cricket/cacti+ploticus

- ClusterMatic – got any war stories to share?

- VMWare ESX on V20z to run up Win2K parasites to host IIS services

- Solaris 9/10 to examine some I/O performance issues