

Grid @ TU Dortmund

Florian Feldhaus, Stefan Freitag, Stephan Nies

Dortmund University of Technology

10. Februar 2009



Present Situation

- received funding for two D-Grid Clusters
- Cluster 1: *grid.uni-dortmund.de* since 12/06
 - 50 FSC BX620 S2 Blades (Dual CPU, Dual Core, 4GB)
 - 6 TB Storage
 - 178 cores in batch system, running SL 4.7 32 Bit
 - GB Ethernet Interconnect
 - gLite 3.1, Globus Toolkit 4.0.5, UNICORE5
 - dCache 1.8, OGSA-DAI WSRF 2.2
 - responsible: IRF/ Physics Department E5

Present Situation (2)

- Cluster 2: *D-Grid Ressource Centre Ruhr* since 04/08
 - 256 HP Proliant BL460c Blades (Dual CPU, Quad Core, 16GB)
 - 100 TB Storage
 - 1980 cores in batch system, running SL 4.5 64 Bit
 - gLite 3.1, Globus Toolkit 4.0.5/7, UNICORE5/6
 - GB Ethernet Interconnect
 - service and worker nodes run para-virtualized (Xen 3.2)
 - extra 24 TB with newest release of SFS (April/May 09)
 - responsible: local computing centre (ITMC)

Present Situation (3)

- site integrated in D-Grid (*udo*) and WLCG (*UNI-DORTMUND*)
- site performing well for LHCb and ATLAS, supporting ALL DGrid VOs
- site currently managed by PHD and diploma students in cooperation with the local computing centre (ITMC)
- currently no FTEs for management

Future plans

- Switch to VMware for service nodes
 - ensure HA
 - evaluate DRS
- Mechanisms for creating virtual appliances
 - independent of virtualization technology (VMware, Xen)
- UAMR (Universitaetsallianz Metropole Ruhr)
 - Universities Bochum, Dortmund and Duisburg-Essen
 - Dortmund responsible for HPC and Grid
- Mid-Term perspective:
(Federated) Tier2