ATLAS Computing @ RZG and MPP

Status

Stefan Kluth, 26.05.08

New hardware at RZG 2008

• CPU

- 4 IBM BladeCenter, 14 HS21 dual quad core
 Xeon 5345 2,33 GHz, 16 GB RAM
- in service end May (power limitations)
- Disk (ca. 250 TB netto)
 - 14 Intel SSR212MC2 servers + JBOD (12+16
 750 GB SATA disks), 4 GB RAM, 2 Xeon 5310, hardware RAID, 10 GbE LAN
 - in production!

Status of LCG/glite@RZG

• CE

- ok, but still on SL3
- installed as virtual servers on new hardware
- in production after new SE

• SE

- separate monbox and new SE
- installed virtual servers on new hardware
- new SE will support SRM 2.2
- in production this week

Grid environment at RZG

- Use grid-ui
 - interactive or "ssh grid-ui <command>"
- Submit jobs "on grid"
 - edg-job-submit
 - ganga on grid-ui!
- Source script (site-specific)
 - not the one from CERN! Please!
 - available for debugging at RZG

Data/job management

- Data registered "on grid" preferred
 - produce dpds/ntuples "on grid", store output using LRZ or RZG SE
- Local "root analysis
 - use LFC to locate files, open with "dcap://"
- Can use LRZ dCache (and vice versa)
 - use LRZ and RZG for jobs "on grid"!

Available resources Tier-2/3

- ATLAS planning for 2007
 - i.e. available in 2008
 - CPU 420 kSI2k, storage 100 TB
 - before LHC rescheduling
- ATLAS ressources 5/2008
 - installed end 2007 and early 2008
 - CPU 900 kSI2k, storage 125 TB
 - additional ressources from BAR (400 kEuro) and D-Grid (200 kEuro)

Planning for 2008/9

- Original budget
 - storage 150 TB, no CPU
- Revised after new requests (HEC, MDT)
 - single π MC with revised G4 physics lists etc. for local hadron calibration, mix of grid and local production (~100 kSI2k, 10 TB)
 - new speed measurements of MDT calibration,
 new storage model, alignment (130 → 280 kSI2k, 5 → 30 TB)
- New BC and 4 fileservers now?

Planning for 2008/9 cnt'd

- Next BAR 26.06.2008
 - prepare application now
 - ATLAS, (S)BELLE, ILC, GERDA, MAGIC, theory, ...
 - new hardware by autuum '08, in production end'08 or early '09
- Need stable system this summer!

OS upgrade at RZG

- Need to upgrade SLES9 → SLES10
 - release 14 (slc4, gcc-346) hard on SLES9
 - local installations 14.0.0 and 14.1.0
- Smooth transition plan
 - Install 4 new BCs with SLES10
 - port grid applications, test local codes
 - upgrade existing systems