STEP'09 Goals and Scope

Analyse post-mortem STEP'09

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Lyon, 26 juin 2009

Preamble

- This is a short reminder of the goals and scope of STEP'09 from the experiments point of view and from our site point of view

STEP'09 General Goals

- STEP: **S**cale **T**esting for the **E**xperiments **P**rogram 2009
  - Implication that regularly (once per year?) some increased scale tests need to be collectively performed

- Goal
  - Verify the **readiness** of the **sites and experiments**, in particular regarding
    - *Data recall from tape at tier-1s for more than 1 experiment simultaneously*
    - *Data analysis activities, mostly at tier-2s*

ATLAS goals

- Test all the activities of the computing model, at nominal data taking rate, in parallel with other experiments
  - Data recording at tier-0, data distribution, detector data reprocessing, simulation data re-reconstruction, analysis, monte-carlo data production

ATLAS goals (cont.)

- Tier-0
  - Record detector data (RAW)
  - Export detector data to tier-1s

- Tier-1s
  - Import detector data from tier-0 and record them some on tape and some on disk
  - Import simulation data from tier-2s
  - Local reprocessing of detector data storing the resulting data on tape
  - Local reconstruction of simulated data storing the resulting data on tape
  - Export data resulting from the reconstruction (AOD) to other tier-1s
  - Import AOD data produced at other tier-1s

ATLAS goals (cont.)

- Tier-2s
  - Produce simulated data
  - Export simulated data to tier-1s
  - Perform analysis (test data access from the worker nodes)

CMS goals

- Tier-0
  - Data recording at full data taking rate, in parallel with other 3 experiments (or at least with ATLAS)
  - Export of data to tier-1s
  - Sustain writing for several days (at least 48 hours)
  - Demonstrate ability to write in at most 1 day, the data taken in 1 day

CMS goals (cont.)

- Tier-1s
  - Import data from tier-0 and record them on tape
  - Local reprocessing of detector data and write the result on tape
  - Import simulation data from tier-2s and store them on tape
  - Export locally produced data (from reprocessing) to other tier-1s
  - Import data produced by other tier-1s and store them on tape
  - Export data to tier-2s for analysis (bursty transfers)

- Tier-2s
  - Perform analysis
    - *Test the CRAB infrastructure*
  - Perform monte-carlo production

ALICE goals

- Tier-0
  - Data recording
  - First pass reconstruction
  - Data export to tier-1s

- Tier-1s
  - Recording of detector data imported from tier-0
  - Local reconstruction of detector data

- Tier-0
  - Detector data recording
  - Export of data to tier-1s
- Tier-1s
  - Import detector data from tier-0
  - Local reconstruction of detector data

Goals for our site

- Test in (almost) real conditions all the services involved in the LHC data storage and processing

- Demonstrate the ability of our storage chain to store and deliver the data at the required rates
  - For local processing and for inter-site transfers

- Identify the monitoring information required to have a detailed view of all the concurrent activities of the 4 experiments

- Identify what else is required for getting ready for LHC startup
  - Procedures & tools

Petite annonce

- Workshop WLCG STEP'09 Post-mortem analysis
  - CERN, 9-10 July 2009
  - http://indico.cern.ch/conferenceDisplay.py?confId=56580

  - Please register!

CCIN2P3

Questions/Commentaires