

LZ and Solid: Grid status

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[*] In alphabetical order.

LZ

- LZ is currently undertaking its first Mock Data challenge
- Elena K is the Monte Carlo production manager
- GridPP produced the complete Monte Carlo Data set in ~ 4 weeks:
 - 132.77 TiB of data comprising 732288 files
- The production run was completed within the allotted time frame
- Both the LZ production interface (developed by A. Richards) and direct submission to DIRAC were used

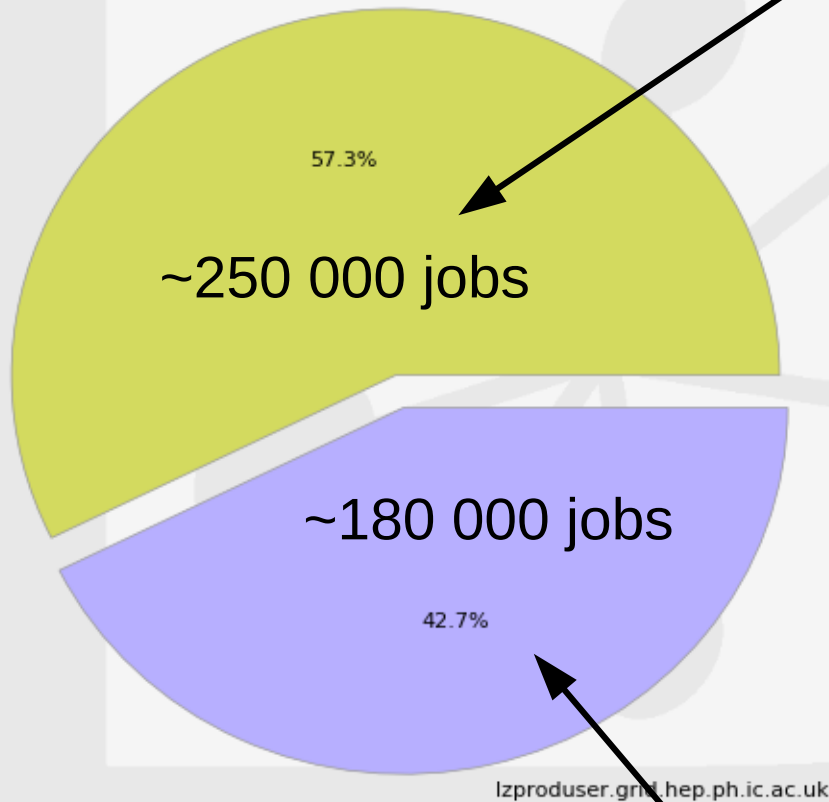
LZ - continued

- The main issue in MC generation was memory consumption
 - no sites enforce 2.2GB/core
 - jobs reaching 6GB had to be rerun by hand at Sheffield
- LZ are aware of this, but trying to improve software is an unpopular job
- Emergency (re)processing at Imperial: Use memory allocation for two cores, but only run one job. (Strictly a 'had to get the job done' measure.)
- The files were transferred to NERSC using the Imperial FTS/gridftp
 - No problems observed

LZ MDC1 Production

Number of Jobs

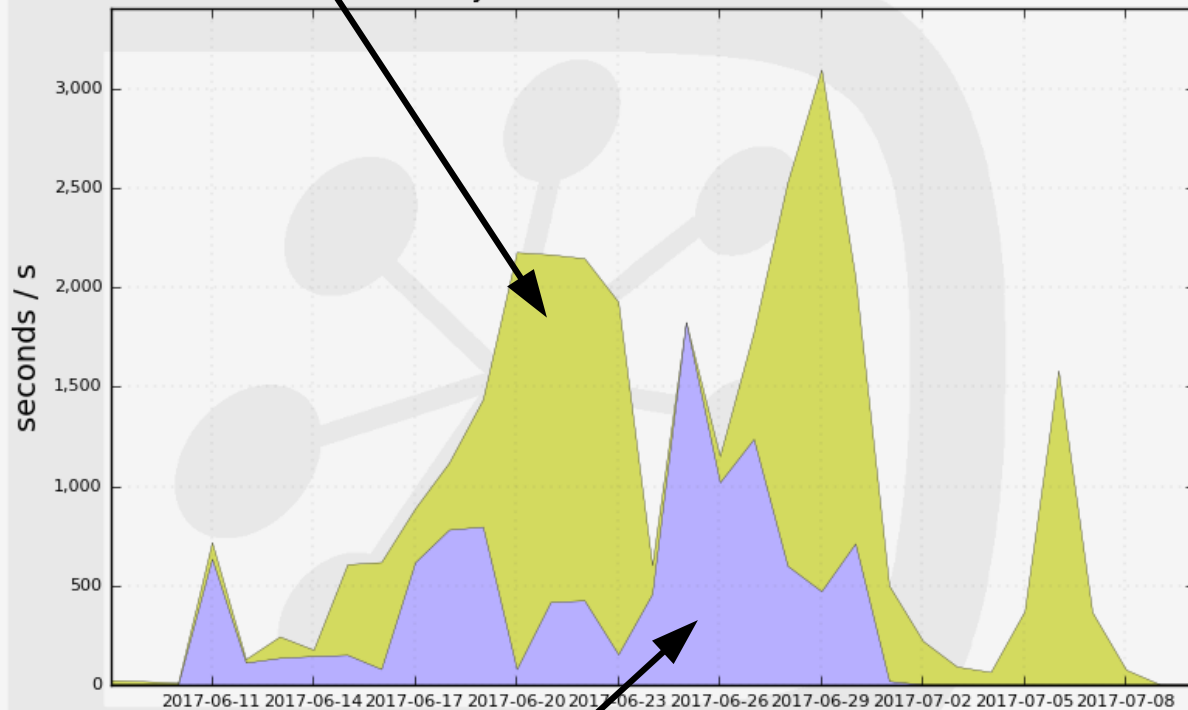
32 Days from 2017-06-09 to 2017-07-11
elena.korolkova



Elena

CPU usage by user

32 Days from 2017-06-08 to 2017-07-10



LZ Production User

Solid Experiment

- SoLid experiment plans to start commissioning/data-taking at the end of October.
- SoLid has a similar computing model to LZ
- Two grid sites: Imperial and Brussels.
- Slow transition to grid work:
 - but now actively looking at DIRAC based job submission.
 - Code in cvmfs repo provided by RAL.
- MC data imported into dirac file catalogue.
- RAL will host a custodial copy of the data on tape.
 - This is for backup, no access for analysis required.
 - Janusz M working on data mover to move raw data from Brussels to RAL tape for backup.

Solid - Datamover

- Move the raw data from the experiment close SE (Brussels) to RAL CASTOR.
- The mover will be run on a dedicated machine at Imperial.
- The mover consist of 2 independent programs, meant to be run periodically with a DB in between:
 - Data collector - discover new files ready to be copied and store files' metadata in the internal DB. Uses DIRAC file management tools to locate the files.
 - Data dispatcher - monitors the DB and periodically initiates FTS transfers to CASTOR. Uses Python FTS API.
- Beta version of the mover exists, RAL are preparing CASTOR space for Solid.