STEP09 chronological summary for LHCb

(source ELOG LHCb + personal comments)

Monday 8th June (and before)

- Transfers completed to Tier-1s for reprocessing exercise
- GGUS ticket submitted to clean disk space at T1s for the prestaging exercise

Tuesday 9th June

- (Disk cleaning completed at IN2P3)
- First express, full and reprocessing jobs submitted
- Staging of input data successful at 6/7 Tier-1 sites
- Failure accessing files on all dCache sites due to the Root 5.22.00a dCache plugin library -> Enabled downloading of input data files to the WN for NIKHEF, IN2P3, GridKa, PIC

Wednesday 10th June

- After downloading enabled for dCache sites, happily running 1.5k+ concurrent data processing jobs the Tier-1s
- CORAL LFC access problems

Thursday 11th June

- LHCb_MC-DST space full at IN2P3 (GGUS ticket 49414) -> solved : token size increased
- IN2P3-CNAF transfers : problem source gridftp server
- CORAL LFC access problems continue -> show stopper (remote access required for STEP'09) we have stopped express, full and reprocessing productions and are removing pending jobs

Friday 12th June

- Reopened the same tickets against all T1 sites for running again a staging exercise and restart the activity with no Oracle CondDB access enabled
- (Cleaning completed at IN2P3)
- Jobs for the express stream production submitted

Monday 15th June

- Planned reprocessing with sqllight replicas (replacement due to CORAL/LFC problem) was stopped as sqlight replicas did not contain the correct magnetic field
- LHCb therefore did declare the end of their STEP activities and will redo scalability for CORAL once a patch available
- Otherwise MC activity ongoing with minimum bias events – 7000 jobs (all sites) and no issues

IN2P3 point of view

Things who worked well :

1) Transfers from CERN to IN2P3
2) Reactivity to the disk cleaning requests for the prestaging exercice (merci Lionel et Jonathan) (the same ticket opened twice)
3) Prestaging exercise -> OK even if no rate measurement for the moment

Things who did not work well :

1) LHCb_MC-DST space full at IN2P3 (GGUS ticket 49414) -> solved : token size increased
2) Problem with IN2P3-CNAF transfers -> due to the incident on our gridftp server
3) 15% IN2P3 share lower than expected

Other :

1) Failure accessing files on all dCache sites due to the Root 5.22.00a dCache plugin library (see http://cctools2.in2p3.fr/elog/support-lhcb/15) . Issue already under investigation both by LHCb and sites.
   IN2P3 : report bug to dCache people -> New dcap library installed and tested at IN2P3 -> Error fixed

Conclusion : No major issue affecting our site but share lower than expected -> Important to understand.

IN2P3 point of view

Main monitoring tools used during STEP09

- Dirac dashboard
- LHCb production ELOG and dedicated mailing list
- Personal scripts
- dCache monitoring
- FTS monitoring

Monitoring tools to improve

• dCache portal today : monitoring of the bringonline requests in a limited time window -> requires to know exactly when the exercise starts

It would be useful to retreive the same informations over a long enough period (the format and the content can be discussed)

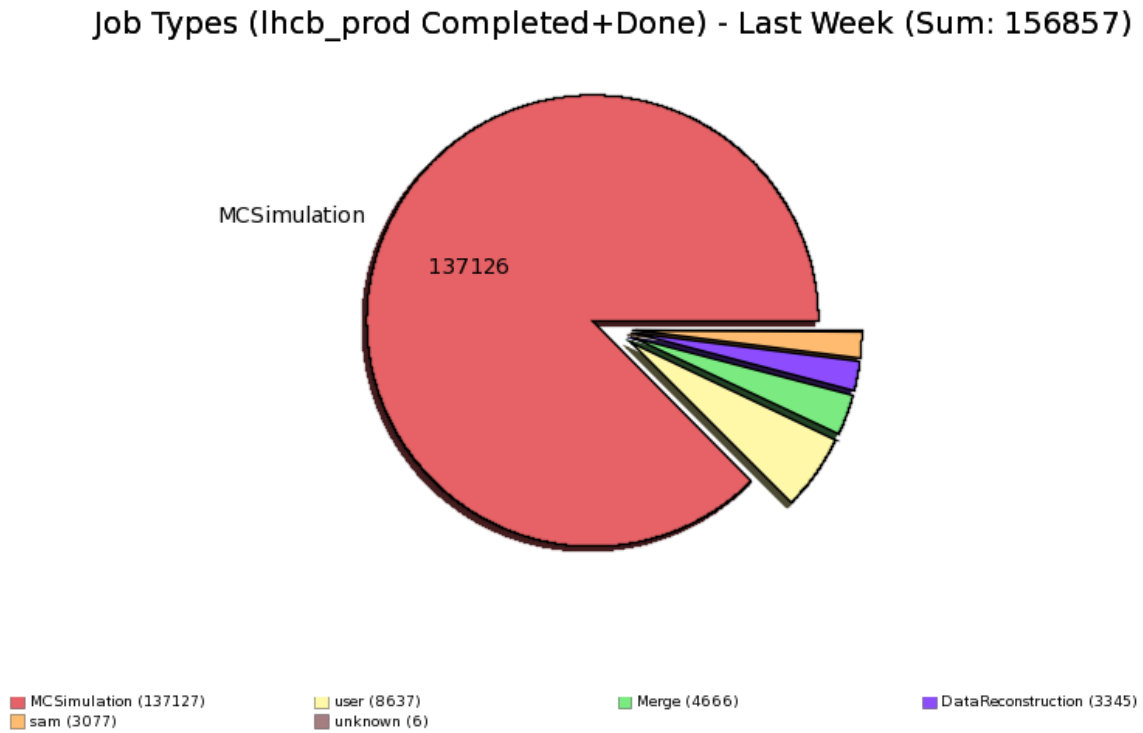
LHCb point of view (week report rather than STEP09 report)

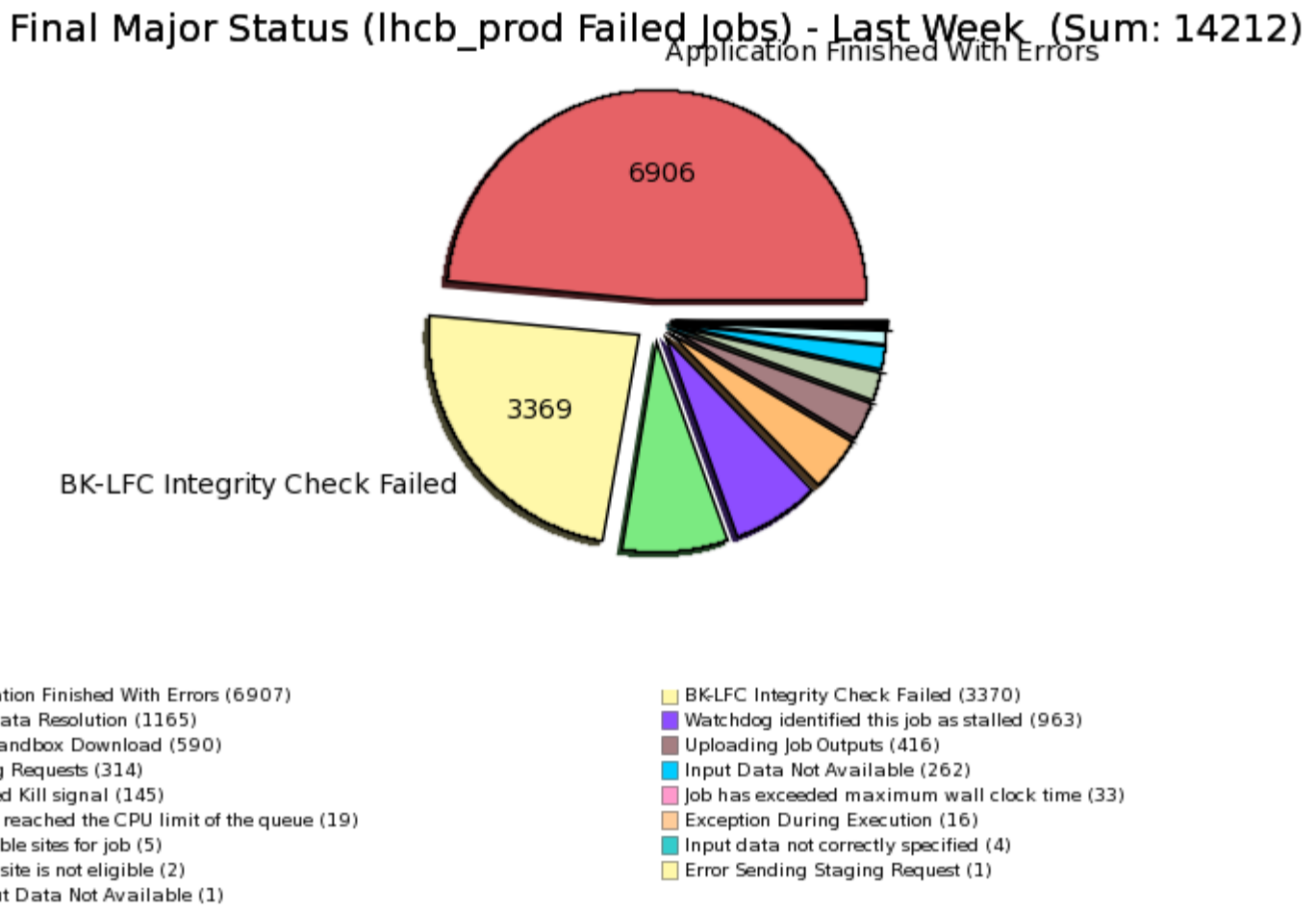
(source : https://twiki.cern.ch/twiki/bin/view/LHCb/DIRACWeeklyReport20090615)

Job Statistics

Summary:

- 171K jobs run last week
- 8.3% failed
- 148.5K Production jobs run to end
- 8.5K User jobs run to the end
- 12.3K Production Jobs Failed
- 1.7 K User Jobs Failed



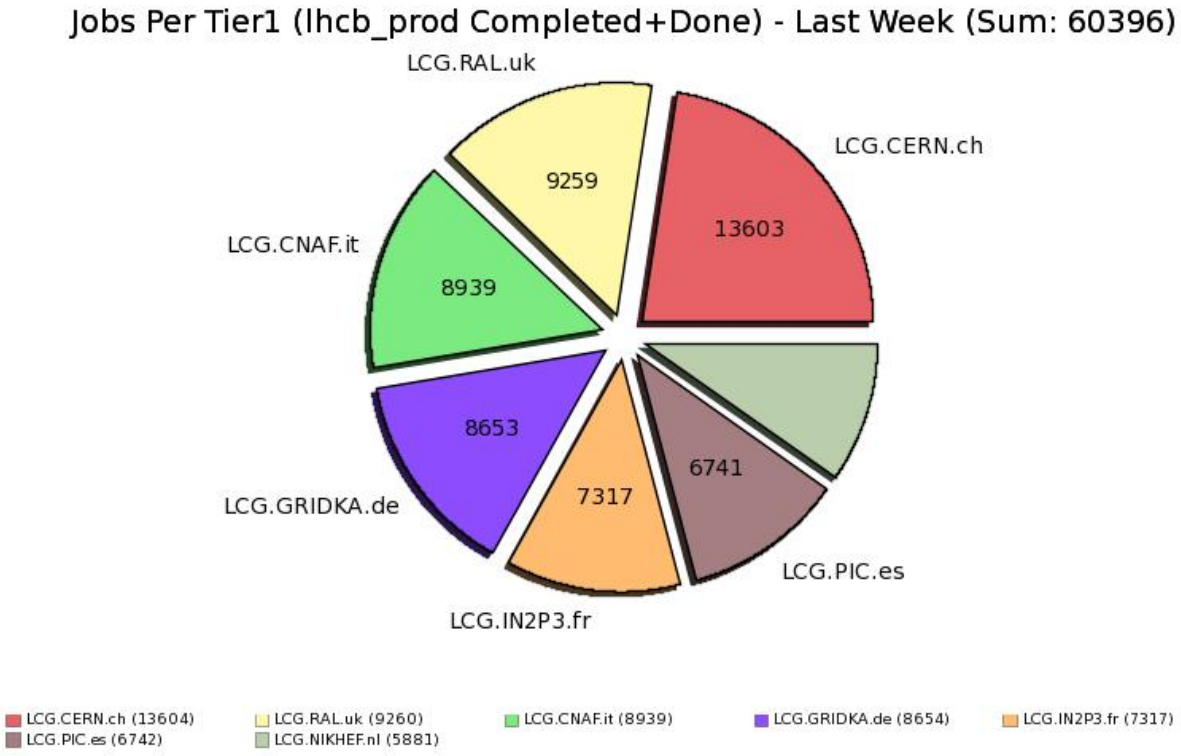


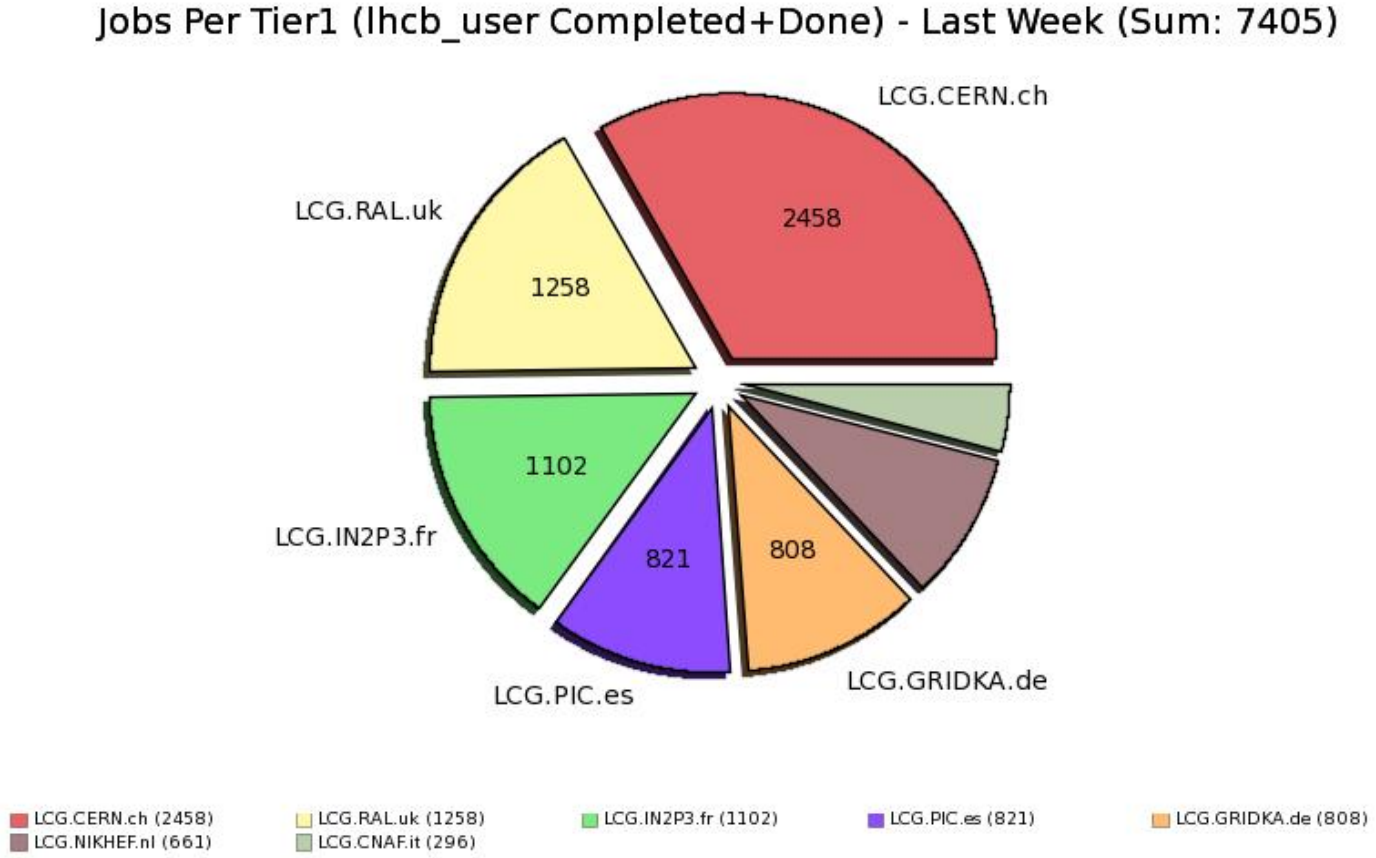
Comment: The BK-LFC mismatch are failures in the WMS because the FEST data of this week was registered incorrectly in the BK/LFC by the RunDB

Running at Tier1's

Summary:

- 60.4K lhcb_prod Jobs at Tier1s
  - Shares descend from CERN, CNAF, RAL, GRIDKA, IN2P3, PIC, NIKHEF
- 7.4K User Jobs at Tier1s
  - 33% CERN share
  - 15% IN2P3 share lower than expected
  - 8% NIKHEF share significantly lower than expected
  - 4% CNAF share significantly lower than expected



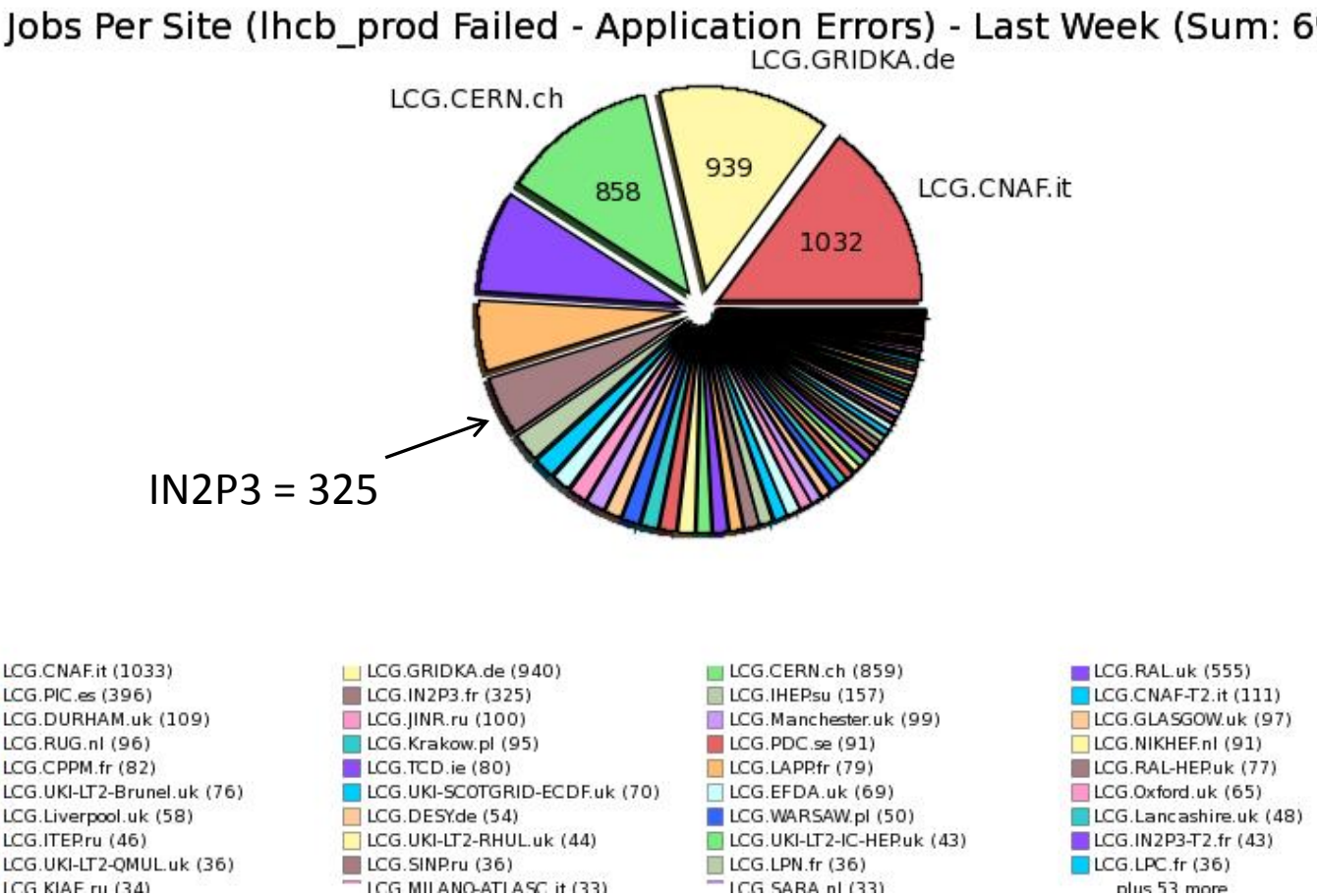

Jobs Per Tier1 (lhcb_user Completed+Done) - Last Week (Sum: 7405)
LCG.CERN.ch
2458
LCG.RAL.uk
1258
1102
LCG.IN2P3.fr
821
LCG.PIC.es
808
LCG.GRIDKA.de
LCG.CERN.ch (2458)
LCG.RAL.uk (1258)
LCG.IN2P3.fr (1102)
LCG.PIC.es (821)
LCG.GRIDKA.de (808)
LCG.NIKHEF.nl (661)
LCG.CNAF.it (296)

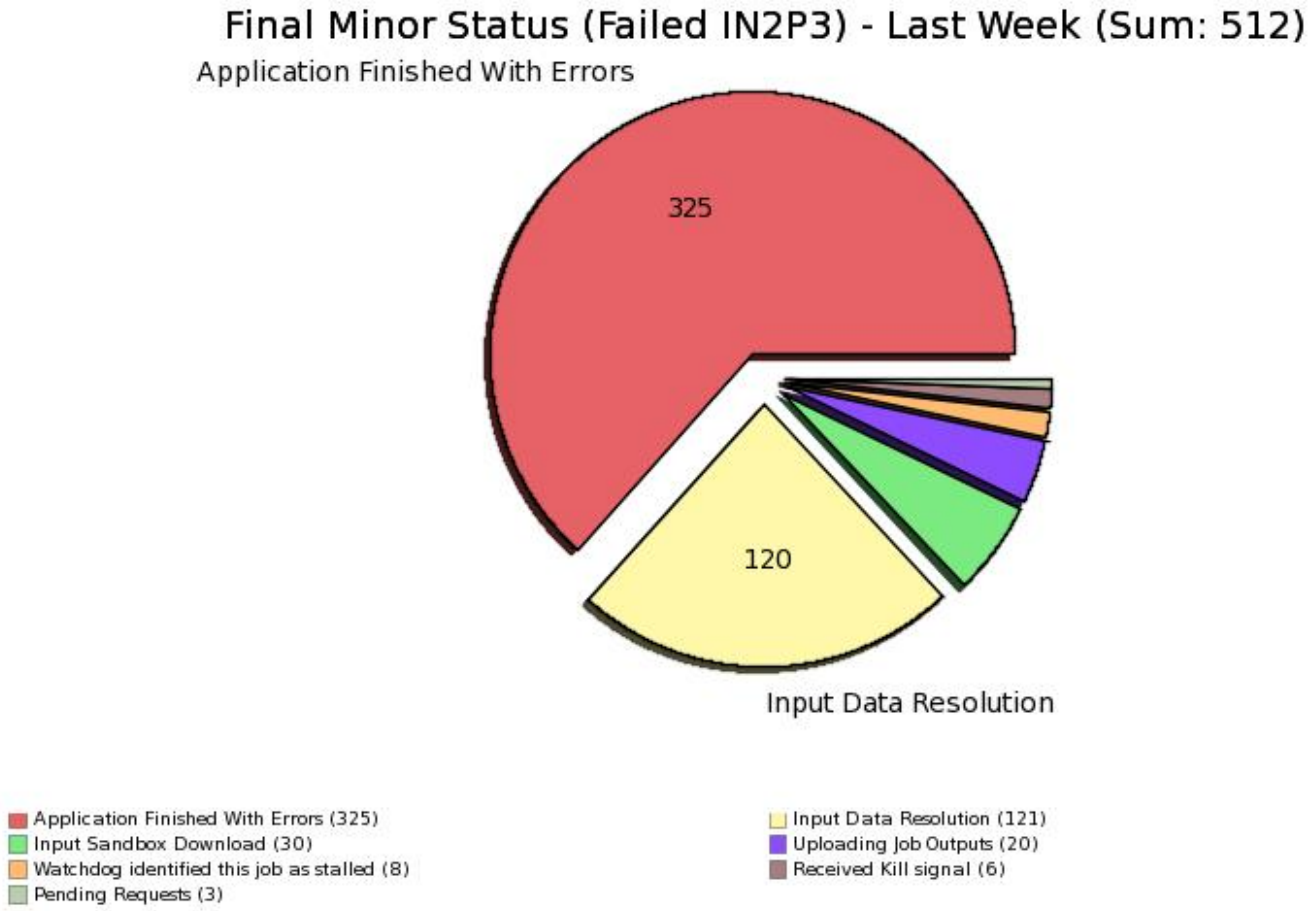
Job Failure Analysis

Summary:

Application Errors were observed in large number at all Tier1 sites (except NIKHEF)

User Jobs failed primarily because of Application Errors then because of Input data resolution




Final Minor Status (Failed IN2P3) - Last Week (Sum: 512)
Application Finished With Errors
325
120
Input Data Resolution
Application Finished With Errors (325)
Input Sandbox Download (30)
Watchdog identified this job as stalled (8)
Pending Requests (3)
Input Data Resolution (121)
Uploading Job Outputs (20)
Received Kill signal (6)