



# DIRAC testbed

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# test setting



parameters used:

- production: 2010\_July\_test
- analysis: BtoKNuNu
- generator: B+B-\_K+nunu
- geometry: DG\_4
- background: MixSuperbBkg
- 
- 
- For each site will be sent a bulk of 100 jobs
- with 10.000 events for each job.



# files to use in test



## input files:

- `lfn:/grid/superbvo.org/production/FastSim/2010_September/input/Br  
uno_RadBhabha.root`
- `lfn:/grid/superbvo.org/production/FastSim/2010_September/input/P  
mcBhabhaBkg.root`
- `lfn:/grid/superbvo.org/production/FastSim/2010_September/input/P  
mcBhabhaBkg_DG_4.root`
- `lfn:/grid/superbvo.org/production/FastSim/2010_September/input/P  
mcPairBkg.root`
- `lfn:/grid/superbvo.org/production/FastSim/2010_September/input/P  
mcPairBkg_DG_4.root`

## software:

- `lfn:/grid/superbvo.org/production/FastSim/2010_September/test_rel  
ease/V0.2.5_SL-5.3_x86_64_rev311.tjz`



# Resources used in DIRAC



| CE                 | SE                 |
|--------------------|--------------------|
| INFN-LNL-2         | PADOVA-INFN        |
| CYFRONET-LCG2      | CYFRONET-LCG2      |
| IN2P3-CC           | IN2P3-CC           |
| INFN-BARI          | BARI-INFN          |
| INFN-MILANO-ATLASC | INFN-MILANO-ATLASC |
| INFN-PISA          | PISA-INFN          |
| INFN-T1            | CNAF               |
| UKI-LT2-QMUL       |                    |
| INFN-FRASCATI      |                    |
| IN2P3-LPSC         |                    |



# Stageout



All output data stored at CNAF and uploaded into DFC

- LFN:/superbvo.org/test\_dir/output\_testbed/%s/framework.root
- LFN:/superbvo.org/test\_dir/output\_testbed/%s/BtoKNuNu.root
- LFN:/superbvo.org/test\_dir/output\_testbed/%s/SemiLepKplusNuNu.root

%s is a parameter (can be used runnumber)



# test results



params: 3001  $\rightarrow$  4000

up to 753 jobs simultaneously running

INFN-BARI, CYFRONET-LCG2, INFN-PISA, INFN-T1  
executing 100 jobs simultaneously

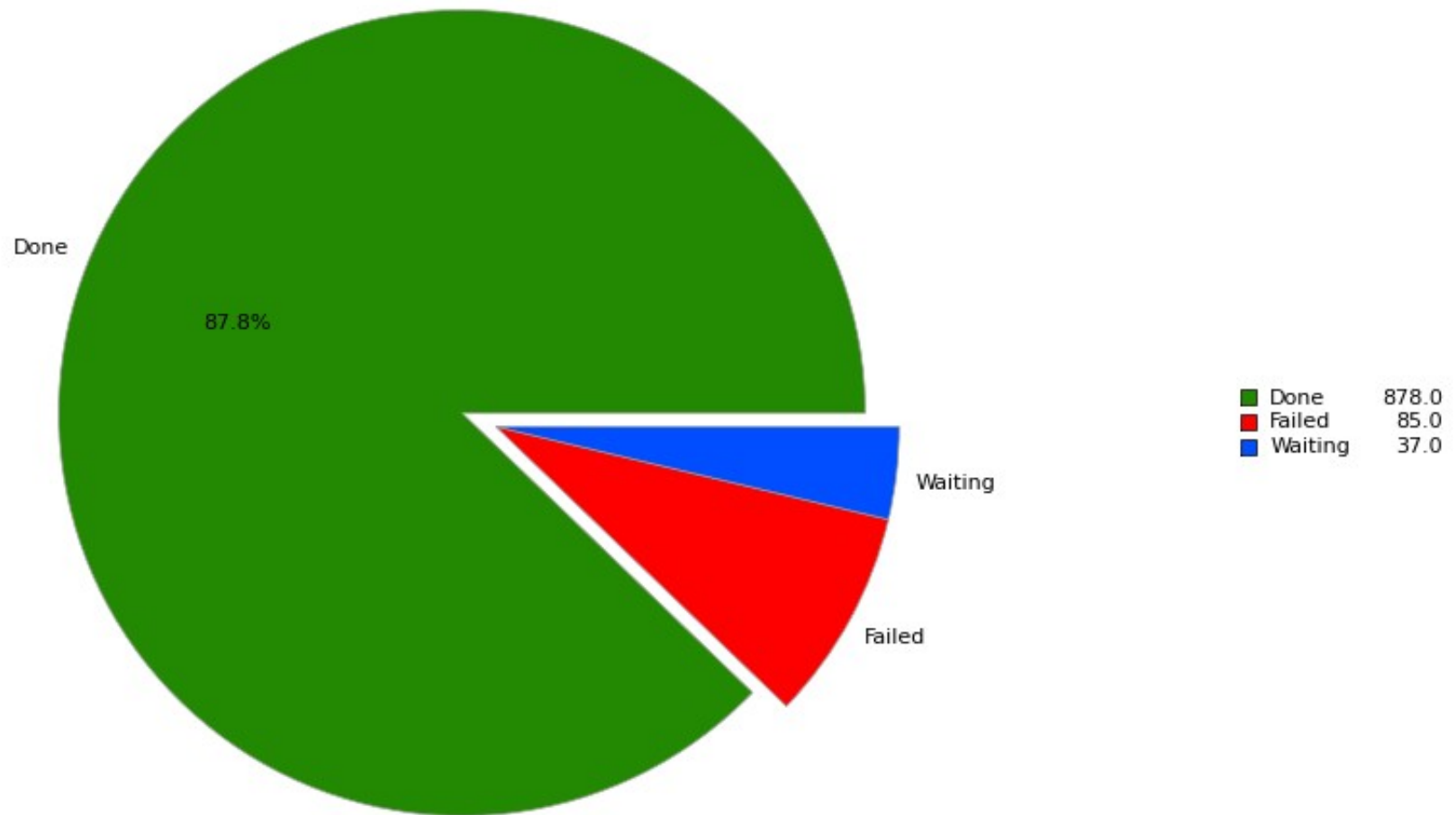
80 jobs failed at IN2P3-CC because submitted to short queue  
(MaxCPUTime = 6)



# test results



JobMonitoring: Selected Statistics: Status

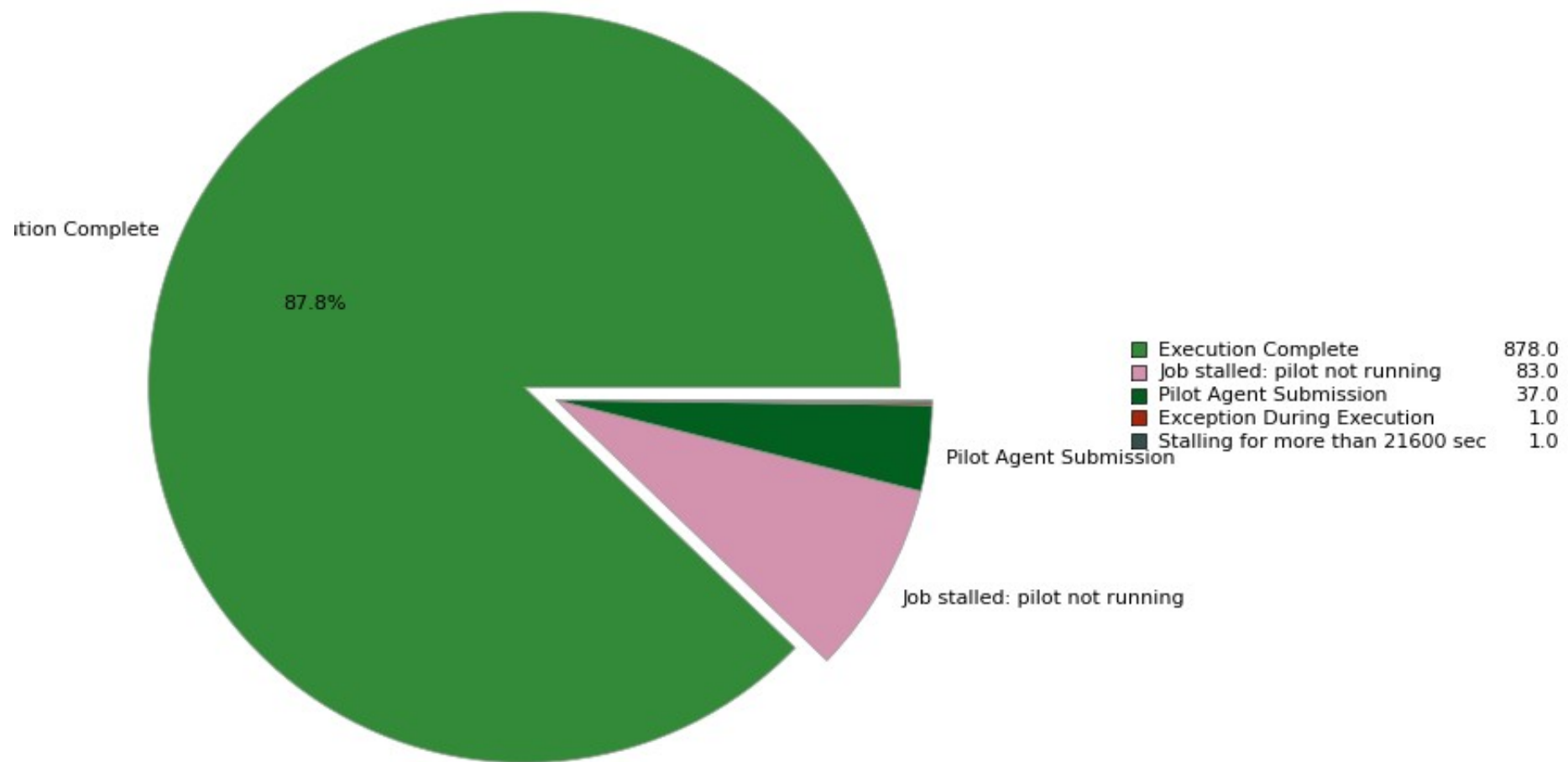




# test results



JobMonitoring: Selected Statistics: Minor status





# test results



Jobs failure per site:

- 41/100 at INFN-FRASCATI
- 80/100 at IN2P3-CC
- 1/100 at UKI-LT2-QMUL

filling mode not worked...

at INFN-T1 jobs successfully done but script not worked properly



# To Do



- upgrade DIRAC to v6r0 (test done using v6r0-pre12)
- fix mc.sh script to works at INFN-T1
- complete configuration of SEs
- understand why filling mode didn't worked in test
- fine tuning of Pilot's parameters (timing, number of pilots) in order to increase responsivity
- set MaxCPUTime to avoid usage of short-living queues
- configure DIRAC to download software once a time per pilot