

Grid Reliability Summary (Job Attempts - WMS) March 2007

SiteName	ALICE	ATLAS	CMS	LHCB	TOTAL
BNL-LCG2	no jobs	9 vs. 598 (1.48%)	no jobs	no jobs	9 vs 598 (1.48%)
CERN-PROD	56390 vs. 1473 (97.45%)	2163 vs. 881 (71.06%)	36470 vs. 12282 (74.81%)	16645 vs. 4258 (79.63%)	111668 vs 18894 (85.53%)
FZK-LCG2	29601 vs. 5483 (84.37%)	2092 vs. 987 (67.94%)	3065 vs. 4041 (43.13%)	13950 vs. 10550 (56.94%)	48708 vs 21061 (69.81%)
IN2P3-CC	10640 vs. 277 (97.46%)	756 vs. 602 (55.67%)	4174 vs. 2131 (66.20%)	4013 vs. 787 (83.60%)	19583 vs 3797 (83.76%)
INFN-T1	29104 vs. 960 (96.81%)	1077 vs. 1651 (39.48%)	11049 vs. 1122 (90.78%)	5257 vs. 1058 (83.25%)	46487 vs 4791 (90.66%)
NIKHEF-ELPROD	493 vs. 2 (99.60%)	687 vs. 216 (76.08%)	15 vs. 1 (93.75%)	5089 vs. 176 (96.66%)	6284 vs 395 (94.09%)
RAL-LCG2	3793 vs. 4140 (47.81%)	1454 vs. 804 (64.39%)	5606 vs. 2805 (66.65%)	7344 vs. 15806 (31.72%)	18197 vs 23555 (43.58%)
Taiwan-LCG2	no jobs	524 vs. 430 (54.93%)	3240 vs. 412 (88.72%)	no jobs	3764 vs 842 (81.72%)
USCMS-FNAL-WC1	no jobs	no jobs	6262 vs. 872 (87.78%)	no jobs	6262 vs 872 (87.78%)
pic	no jobs	1193 vs. 302 (79.80%)	2482 vs. 1459 (62.98%)	3748 vs. 7199 (34.24%)	7423 vs 8960 (45.31%)
TOTAL	130021 vs 12335 (91.34%)	9955 vs 6471 (60.61%)	72363 vs 25125 (74.23%)	56046 vs 39834 (58.45%)	268385 vs 83765 (76.21%)

The URL of this page (providing additional information) is: <http://dboard-gr.cern.ch/dashboard/data/monthlysummaries/Mar-07.html>

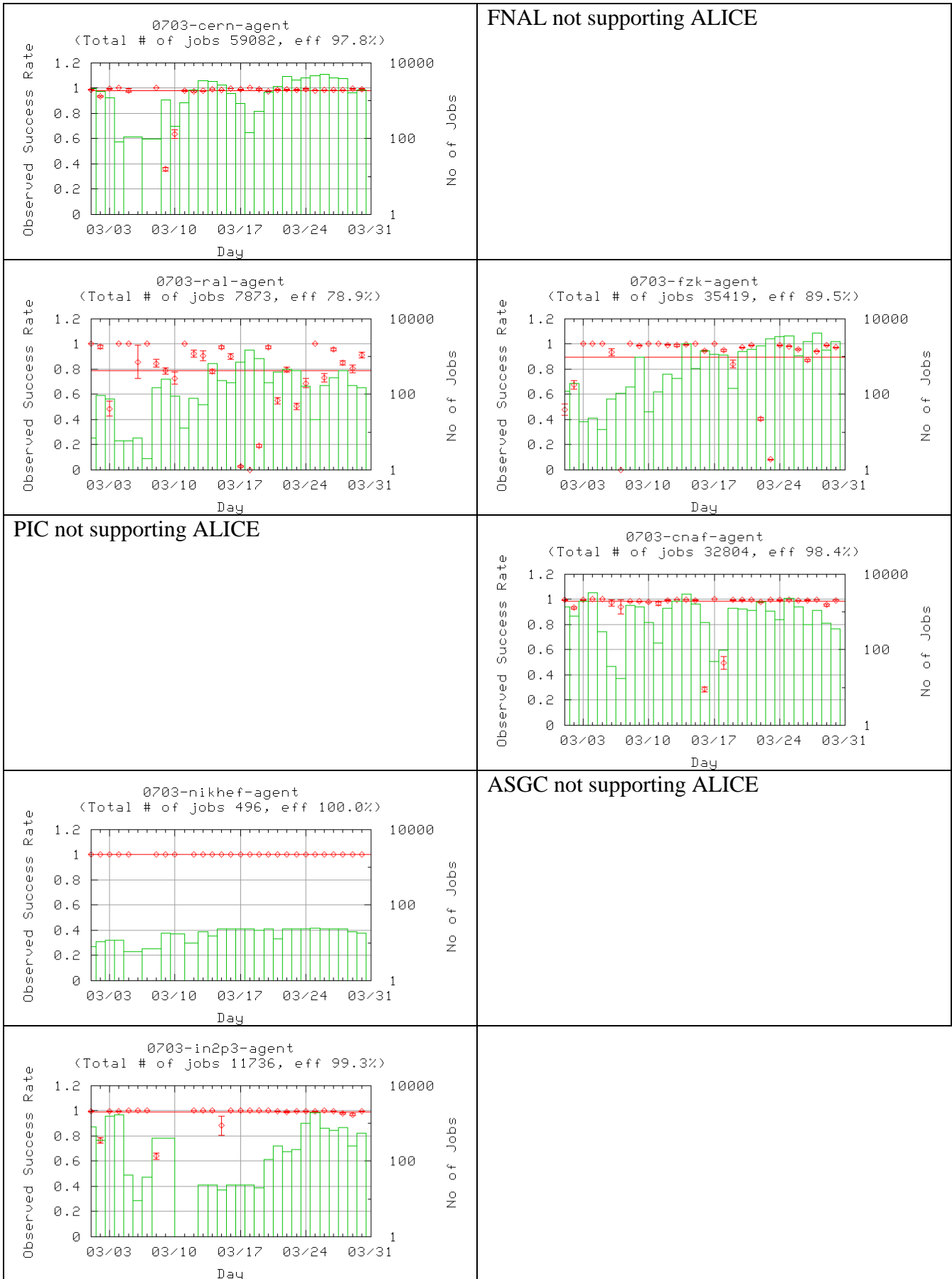
This table includes job attempts for jobs that went through a WMS RB. In the case of CMS, only jobs that report to RGMA are included. For the other three VOs, we also include jobs reported by the Imperial College RunTime Monitor

This table does not include jobs submitted directly to the CE, since they do not generate logging information

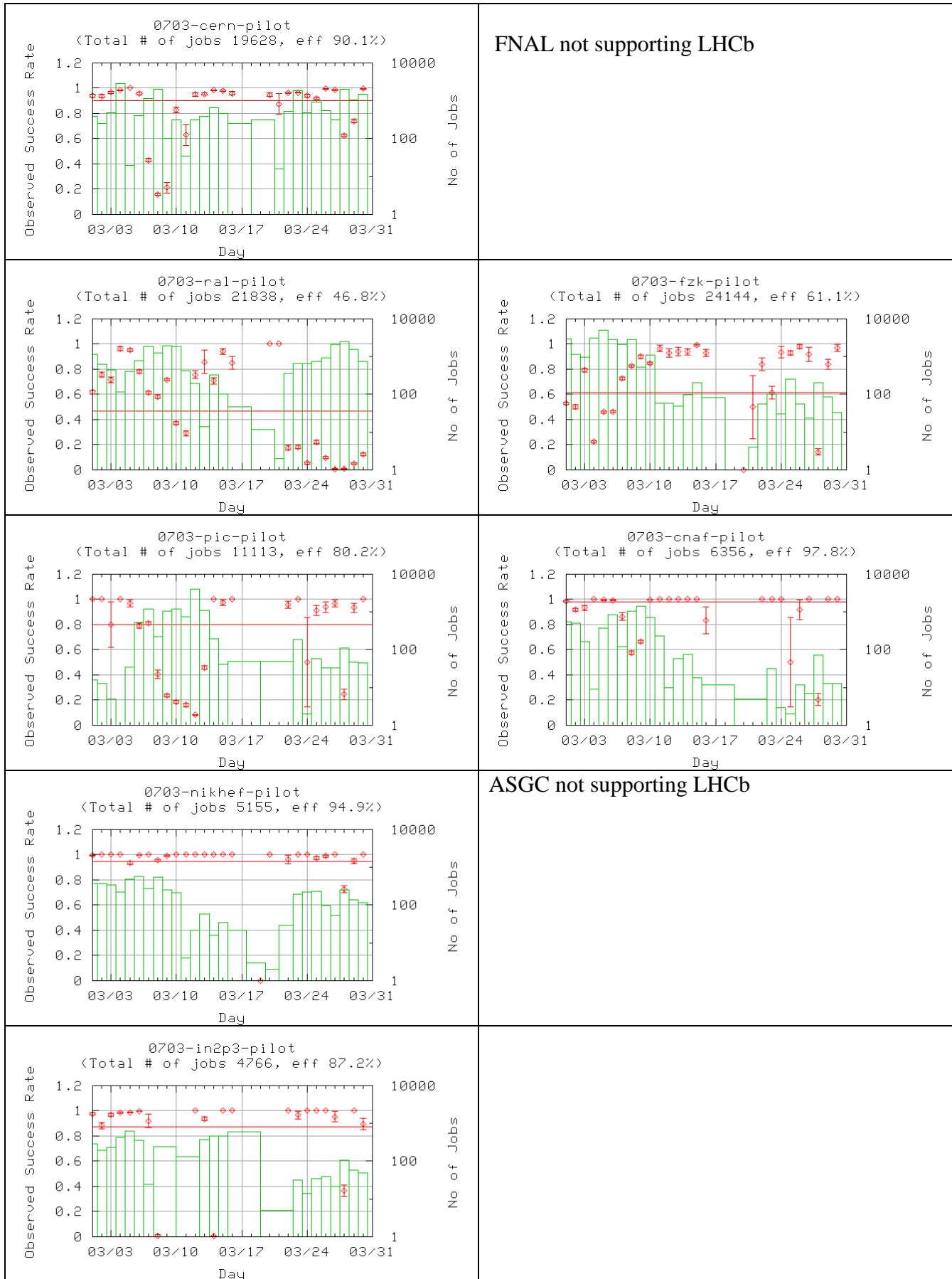
CRAB users analysis jobs (VO=CMS) March 2007



Job agents (VO=ALICE) March 2007



Pilot jobs (VO=LHCb) March 2007



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Comments

Grid Reliability

The Grid Reliability table shows the efficiency computed as the ratio of successful jobs attempts over the total number of attempted submissions. In each cell, the number of success vs failures is also printed. We consider successful attempts those that finish with either status 'CLEARED' or 'DONE'. In case that the job has been followed up by RGMA, we also require that the last message of the job attempt was either 'Job terminated successfully' or 'User retrieved output sandbox'. Another detail that has to be taken into account is that attempts that finish with a message like 'Retry count limit reached' are considered neither as failed nor as successful.

This measurement relies on the WMS logging (Logging and Bookkeeping) and uses the information of all job submission attempts (i.e. a successful job execution might be the result of the 2 unsuccessful submission attempts and a final successful one, in the case that the WMS allows at least 2 re-submissions).

The "total" cells contain the efficiency summing up by site or by VO. A "grand-total" cell estimates the efficiency of the overall service as seen by the 4 VOs as a whole. Note that all of these figures are computed using the total of number of attempted submissions – the efficiency observed by the user would be the ratio of successful jobs to the total number of jobs submitted by the user (re-submission attempts by the WMS would not be included).

These efficiency figures account only for the Grid efficiency and do not contain application failures or site problems independent of the WMS

Application efficiency

The red points are the efficiency calculations computed day-by-day with the statistical error. The green histograms show (log scale on the right hand side of the plot) the number of job executed per day.

The data are a subset of all the jobs executed by a given VO.

- CMS: CRAB user analysis jobs
- ALICE: job agents
- LHCb: pilot jobs

Efficiencies are computed using n (number of jobs submitted, either finished or aborted, but excluding automatic re-submissions by the WMS) and k (number of jobs finished successfully from a Grid point of view).

The efficiency is $\varepsilon = \frac{k}{n}$ and the statistical error (shown on the plot) is $\sigma = \sqrt{\frac{\varepsilon(1-\varepsilon)}{n}}$.

The mean value (red horizontal line and printed at the top of the plot) is the weighted means of all ε (day-by-day) and the error is the statistical error plus a 1% fixed systematic error (added in quadratically).

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Other sites

We have also created a tool to display the efficiency of any site. The URLs below can be used to generate plots similar to the ones presented in this report.

<http://dashb-alice/dashboard/request.py/MonthlyReportIndex>

<http://dashb-atlas/dashboard/request.py/MonthlyReportIndex>

<http://dashb-lhcb/dashboard/request.py/MonthlyReportIndex>