

http://lcg.web.cern.ch/LCG/MB/availability/site_reliability.pdf

SAM - Service Availability Monitoring Data

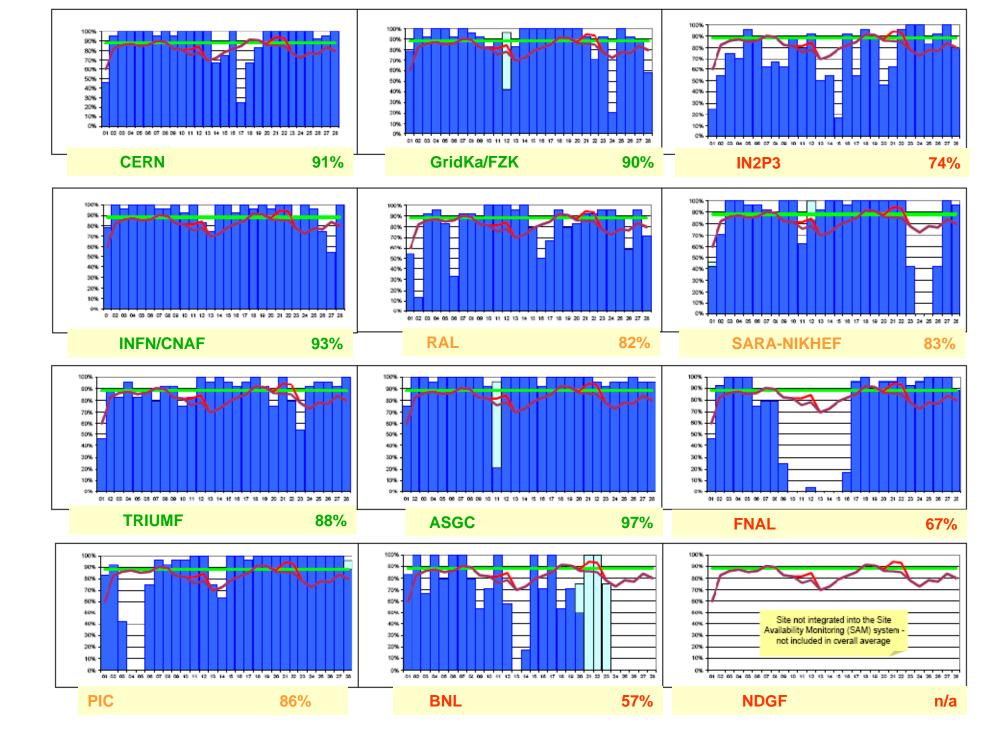
February 2007

7 Colour coding limits: ≥TARGET: 88%

WLCG Tier-1s + CERN

Reliability - Availability/Scheduled_Availability (Scheduled_Availability=(1 Scheduled_Down_Time); tests are not run while scheduled down)

CERN-PROD	FZK-LCG2	IN2P3-CC	INFN-T1	RAL-LCG2	SARA- MATRIX	TRIUMF- LCG2	Taiwan-LCG2	USCMS-FNAL WC1	PIC	BNL-LCG2
46%	79%	25%	79%	54%	44%	46%	75%	46%	83%	83%
96%	100%	54%	100%	13%	71%	88%	100%	92%	92%	100%
100%	92%	75%	96%	92%	100%	83%	100%	100%	42%	67%
100%	100%	71%	100%	96%	100%	96%	96%	100%	0%	100%
100%	100%	96%	100%	83%	96%	83%	100%	100%	0%	79%
100%	92%	88%	100%	33%	96%	88%	100%	75%	75%	100%
96%	100%	63%	96%	92%	92%	79%	100%	79%	96%	100%
100%	96%	67%	96%	92%	88%	92%	100%	79%	92%	79%
96%	92%	63%	100%	88%	100%	92%	100%	25%	96%	54%
100%	83%	88%	92%	100%	100%	75%	92%	0%	96%	71%
100%	88%	79%	100%	100%	63%	83%	84%	0%	100%	100%
100%	91%	92%	83%	100%	100%	100%	100%	4%	100%	58%
100%	83%	50%	75%	96%	92%	96%	100%	0%	75%	0%
67%	100%	54%	100%	100%	100%	100%	100%	0%	63%	17%
75%	100%	17%	100%	79%	100%	96%	100%	0%	100%	100%
100%	100%	92%	92%	50%	96%	92%	92%	17%	100%	71%
25%	100%	54%	100%	67%	100%	96%	100%	96%	96%	100%
6/%	100%	96%	96%	96%	100%	100%	100%	100%	100%	54%
83%	100%	88%	100%	79%	100%	92%	100%	88%	100%	71%
100%	100%	46%	96%	83%	100%	75%	100%	96%	100%	67%
100%	92%	63%	100%	92%	100%	100%	100%	96%	100%	
100%	71%	96%	100%	92%	100%	79%	96%	100%	100%	
100%	92%	100%	88%	96%	42%	54%	92%	92%	100%	0%
100%	21%	100%	100%	96%	0%	92%	96%	96%	100%	0%
100%	100%	83%	96%	88%	0%	96%	96%	100%	100%	0%
92%	92%	92%	75%	58%	42%	96%	100%	100%	100%	0%
96%	88%	100%	54%	96%	100%	92%	96%	100%	100%	0%
100%	58%	79%	100%	71%	96%	100%	96%	88%	96%	0%
91%	90%	74%	93%	82%	83%	88%	97%	67%	86%	57%





Site	Jan 07	Feb 07
CERN	99	91
GridKa/FZK	85	90
IN2P3	96	74
INFN/CNAF	75	93
RAL	80	82
SARA-NIKHEF	93	83
TRIUMF	79	88
ASGC	96	97
FNAL	84	67
PIC	86	86
BNL	90	57
NDGF	n/a	n/a

The target of 88% for the best 8 sites not reached

5 Sites > 88% (target) 5+3 Sites > 79% (90% of target)

LCG Summary of Issues and Solutions Reported

Description	SITE: Problem, Solution
SRM/MSS	IN2P3: SRM/dCache failures, upgraded SRM server CERN: Unalarmed CASTOR failure, fixed the configuration INFN: CASTOR overload, increased pool disk space FZK: SRM not responsive, dCache patch applied, needs to be verified RAL: CASTOR log files too large, solved with log files rotation TRIUMF: SRM overloaded, dCache patch applied BNL: SRM overloaded and unresponsive, patches + SRM DB upgraded
BDII overload/timeout	RAL: BDII timeouts and RB problems, added 2 nodes situation improved TRIUMF: CERN Top-level BDII timeouts, moved to local top-level BDII
Other Load Problems, upgrading hardware	IN2P3: CE overloaded, fixed RB config PIC: CE overload, added nodes and banned temporarily some users FNAL: Gatekeeper instabilities, upgraded hardware
Not understood	FZK: RM failures (RM or BDII timeouts) RAL: Unspecified Gridmanager Error, GGUS ticket submitted
Operational Issues	IN2P3: Misconfigured RB, fixed CERN: Misconfigured test systems, fixed FNAL: CSH misconfigured after cluster upgrade, fixed BNL: Moved to SL4, SAM and gLite do not run until new release NDGF: Not reporting
SAM	IN2P3:message are not clear enough SARA: SAM modifications needed to access resources at NIKHEF



- Not outstanding issues if the upgrades planned go well
 - SRM and MSS start being overloaded, by real experiments probably
 - Individual site BDII are needed (decided at Operations)
 - Hardware improvements helped in many cases
- Sites reliability and SAM reliability seems to have improved
 - Need to improve the messages
- Future upgrades still have not been implemented
 - SL4, gLite 3.1, SRM 2.2, etc
- Check/report to the weekly Operations Meeting in the weekly report
 - Work is ongoing to add it to the GOC interface used for the weekly reports
 - Not ready for March, but for end April probably yes
- Summary included to the Quarterly Reports