Site Reliability Reports at the Operations Meeting

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Reliability Reports – Until now

- **The targets for 2007 for each site are verified and reported since May 2006**
    - **Using the SAM test results**
    - **Verifying monthly average vs the target for the site**
    - **For Tier-0 and Tier-1 sites**
- **Target for each site**
    - **88% - current target**
    - **91% - by Jun 07**
    - **93% - by Dec 07**
- **Taking only the 8 best sites**
    - **91% - current target**
    - **93% - by Jun 07**
    - **95% - by Dec 07**

  http://lcg.web.cern.ch/LCG/MB/availability/site_reliability.pdf
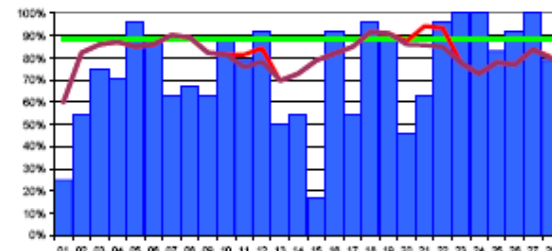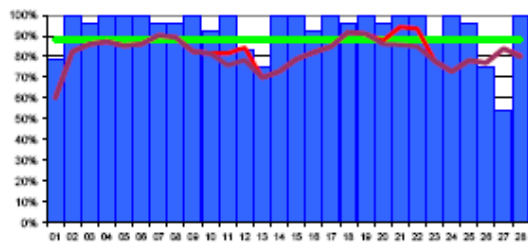- **Example that follows is from February 2007**
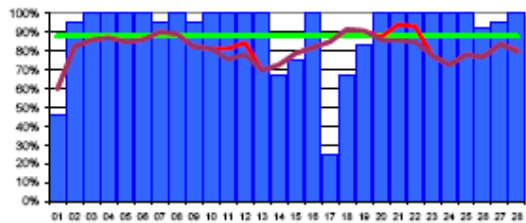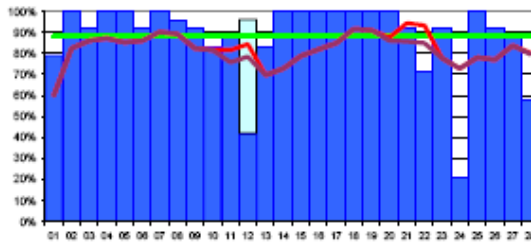
CERN	91%
GridKa/FZK	90%
IN2P3	74%
INFN/CNAF	93%
RAL	82%
SARA-NIKHEF	83%
TRIUMF	88%
ASGC	97%
FNAL	67%
PIC	86%
BNL	57%
NDGF	n/a
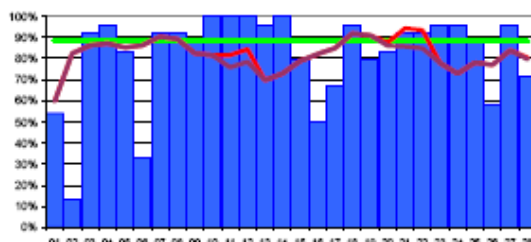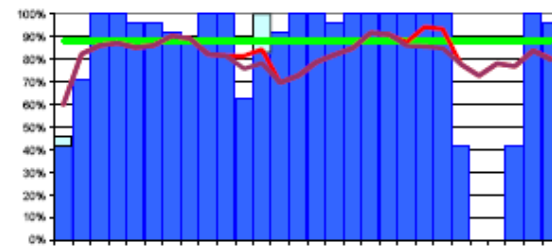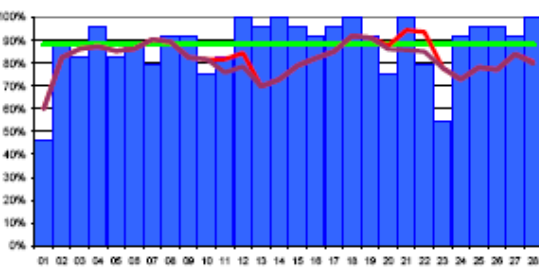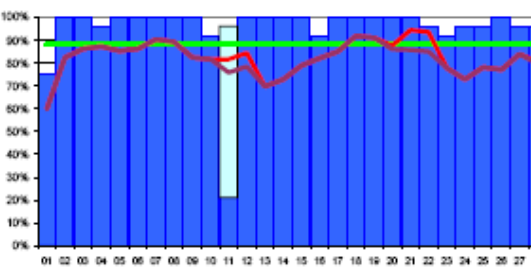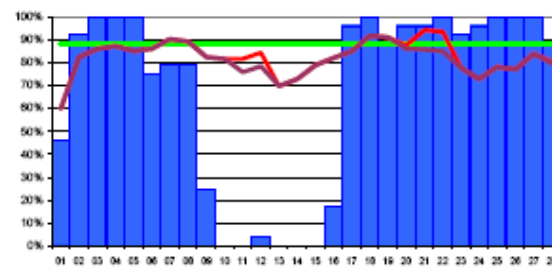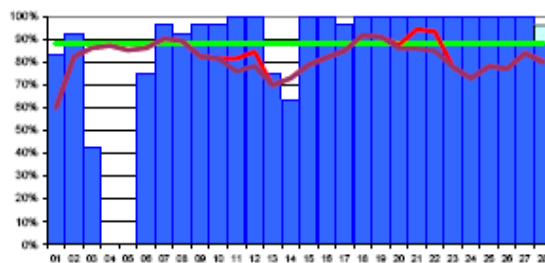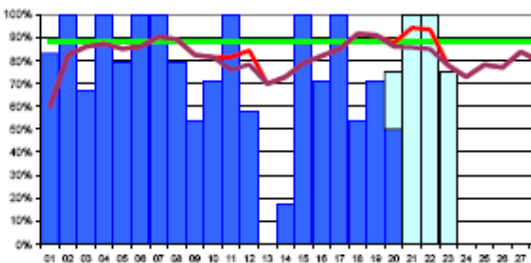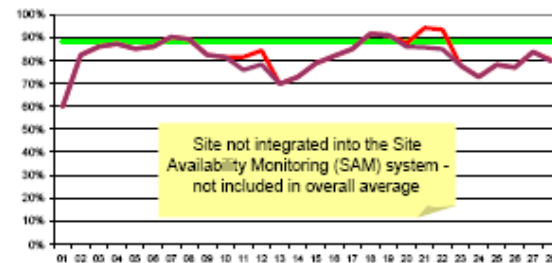
Site not integrated into the Site Availability Monitoring (SAM) system - not included in overall average

February 2007   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%
67%	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%

Jan 07 and Feb 07

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)

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

Upcoming Changes to Reporting

- **Currently the reports are sent to the LCG MB when the reliability data is distributed**
  - **By the MB member of the site**

- **Change the reports from monthly to weekly**
- **At the weekly site reports (in the CIC portal)**
  - **The weekly report will contain a new section to comment the downtime periods, called "Availability reports"**
  - **All downtimes >= 2h should be commented**

  ```
  Date:
  Reason:
  Severity:
  Solution:
  ```

CIC OPERATIONS PORTAL

RC PRODUCTION REPORT

Weekly Operations Status report
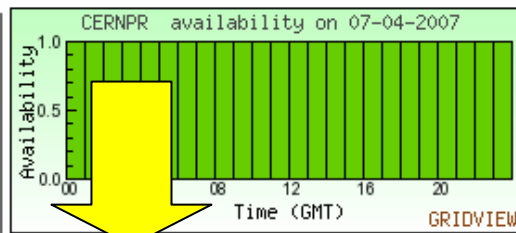
CERN-PROD

Reporting Period : [ ] **to** [ ]

Availability

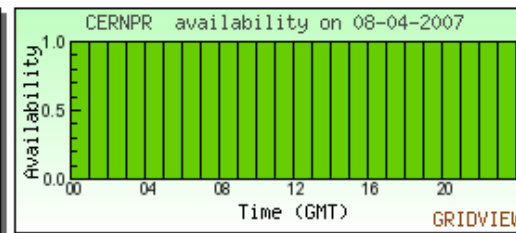The following graphs come from gridview framework :
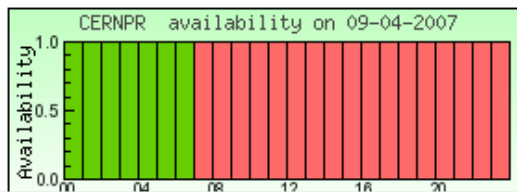
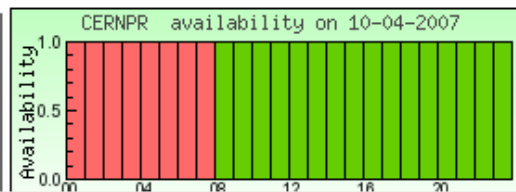**Availability on 2007-04-06**
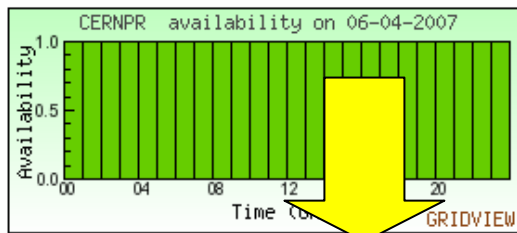
Availability on 2007-04-07

Availability on 2007-04-08

Availability on 2007-04-09

Availability on 2007-04-10

Availability on 2007-04-11

CERN-PROD :Report on 2007-04-06

CERN-PROD :Report on 2007-04-07

CERN-PROD :Report on 2007-04-08

CERN-PROD :Report on 2007-04-09

CERN-PROD :Report on 2007-04-10

CERN-PROD :Report on 2007-04-11

Sites that should report

Tier-0 and Tier-1 Sites in GOC DB	
Tier-0 Site	**Name in GOC DB**
CERN	CERN-PROD (cern t0)
Tier-1 Site	**Name in GOC DB**
ASGC	Taiwan-LCG2 (ASGC Taipei, Taiwan)
BNL	BNL-LCG2 (Brookhaven National Laboratory, New York, USA)
INFN	INFN-T1 (INFN-T1 Bologna, Italy)
FNAL	USCMS-FNAL-WC1 (Fermi National Accelerator Laboratory, Illinois, USA)
FZK	FZK-LCG2 (FZK, Karlsruhe, Germany)
IN2P3	IN2P3-CC (IN2P3, Lyon, France)
NDGF	NDGF-T1 (Nordic Data Grid Facility)
PIC	pic (PIC (port d'informacio cientifica))
RAL	RAL-LCG2 (RAL, GridPP Tier-1 Computing, Oxfordshire UK)
SARA-NIKHEF	NIKHEF-ELPROD (NIKHEF, Amsterdam, The Netherlands)
	SARA-LISA (SARA, Amsterdam, The Netherlands)
	SARA-MATRIX (SARA, Amsterdam, The Netherlands)
TRIUMF	TRIUMF-LCG2 (TRIUMF, Vancouver, Canada)

Next Steps

- **All sites should comment their down time in the weekly report to the Operations Meeting**
  ```
  Date:
  Reason:
  Severity:
  Solution:
  ```

- **They will be extracted and checked every Monday**

- **Missing reports will be requested to the MB on Tuesday**

- **A monthly summary will be presented to the MB**

- **Target for each site**
  - **88% - current target**
  - **91% - by Jun 07**
  - **93% - by Dec 07**