



CMS WLCG reliability in April 2008

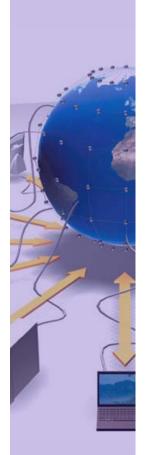
Andrea Sciabà

WLCG Management Board May 13, 2008



GS CMS Critical Tests in FCR





Test name	Run by	Meaning					
Computing Element							
CE-sft-job	CMS	If fails no CMS job can be run					
CE-sft-caver	OPS	If fails CA certs or CRLs are not updated					
SRMv2							
SRMv2-lcg-cp	CMS	If fails no file can be copied from UI to SRMv2 using lcg-cp					



GS Re

Remarks

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- CMS is decommissioning SRMv1 ⇒ no critical tests anymore on SRMv1 since the end of April
- SRMv2 is not a critical service in GridView ⇒ SRMv2 failures do not affect site availability ⇒ availability seriously misrepresented from now on
- The many CMS-specific SAM tests (for FroNTier, software installation, CMS local site configuration, local file stageout etc.) are not critical in FCR because
 - in most cases they do not indicate a problem at the Grid level ⇒ there is no point in "blaming" the site in a WLCG context
 - they are relevant only for specific types of jobs
 - they are anyway critical (when needed) in the SAM Dashboard



GS Reliability in April





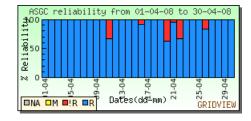


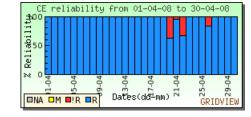
		1				
	OPS	ALICE	ATLAS	CMS	LHCb	
CERN-PROD	95%	100%	1%	80%	59 %	CERN-PROD
DE-KIT	95%	97%	50%	84%	34%	FZK-LCG2
FR-CCIN2P3	98%	100%	5%	98%	42 %	IN2P3-CC
IT-INFN-CNAF	73%	89%	31%	76%	0%	INFN-T1
NDGF	85%	100%	-	-	-	NDGF-T1
ES-PIC	90%	100%	41%	98%	94%	pic
UK-RAL	93%	97%	0%	70%	34%	RAL-LCG2
NL-T1	90%	86%	0%	-	33%	SARA-MATRIX
TW-ASGC	97%	100%	22%	96%	-	Taiwan-LCG2
CA-TRIUMF	96%	-	19%		-	TRIUMF-LCG2
US-FNAL-CMS	77%	-	-	96%	-	USCMS-FNAL-WC1
US-T1-BNL	93%	-	N/A		-	BNL-LCG2

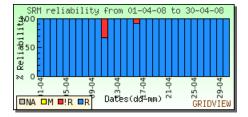


Reliabilities by site (¬ \ **CERN: 80%** CERN-PROD reliability from 01-04-08 to 30-04-Reliability RIDVIE 21 DA DM .R R Dates(dd=mm) SRM: status unknown because SRMv1 endpoint not used anymore by CMS since long

- 80% is an artefact (periods in status UNKNOWN are ignored)
- **ASGC: 96%**







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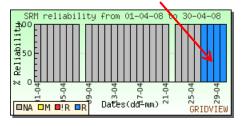
- CE: intermittent job submission errors
- SRM: sporadic CASTOR errors ("device too busy")





CE reliability from 01-04-08 to 30-04-08

SRMv1 tests not critical anymore





Reliabilities by site



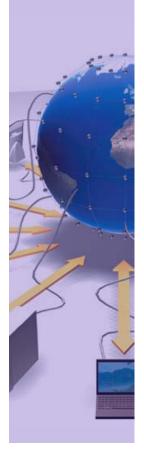
Display Reliability Graphs

m Bookmark

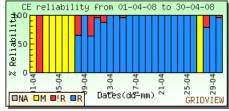
SAM Test Results for site FNAL

Test Criticality Defining VO : CMS (Click on the Test Result Graph to View Details)

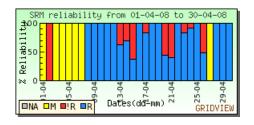
Service	Node	Test Name	Test VO	Test Help	Critical	Test Results
CE cmslcgce.fna		Service Status				00 04 08 12 16 20
		CE-sft-caver	OPS	?	Y	00 04 08 12 16 20
		CE-sfl-job	CMS	?	Y	00 04 08 12 16 20
		CE-cms-basic	CMS	?	N	00 04 08 12 16 20
		CE-cms-dummy	CMS	?	N	00 04 08 12 16 20
		CE-cms-frontier	CMS	?	N	00 04 08 12 16 20
		CE-cms-mc	CMS	?	N	00 04 08 12 16 20
		CE-cms-squid	CMS	?	N	00 04 08 12 16 20
	cmslcgce.fnal.gov	CE-cms-swinst	CMS	?	N	0 04 08 12 16 20
		CE-sft-lcg-rm	CMS	?	N	00 04 08 12 16 20
		CE-sft-log-rm-op	CMS	?	N	00 04 08 12 16 20



GS Reliabilities by site IN2P3: 98% IN2P3-CC reliability from 01-04-08 to 30-04-0 CE reliability from 01-04-08 to 30-04-08 Reliability Reliability re. Dates(dd=mm) รู้ รู้ GRIDVIEW SRM: very few connection timeouts • CNAF: 76% INFN-T1 reliability from 01-04-08 to 30-04-0 Reliabilitu Reliability 000000 ≈ 0 GRIDVIEW



Dates(dd=mm)



CERN

reliability from 01-04-08 to 30-04-08

Dates(dd=mm)

Reliabili M

29-04 SRIDVIEW Department

GRIDVIEL

CE: a few job submission errors

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Dates(dd-mm)

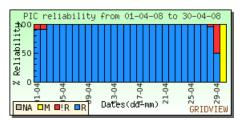
■NA ■M ■!R ■R

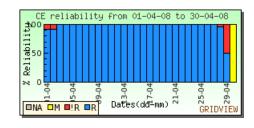
 SRM: some communication errors and timeouts ERN

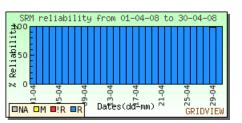
GS Reliabilities by site

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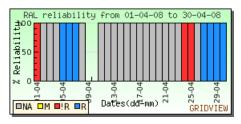
• PIC: 98%

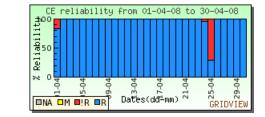


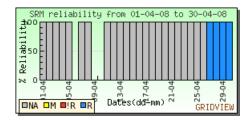




- CE: some errors due to a network intervention
- RAL: 70%







- CE: a few disappearances from BDII
- SRM: status unknown because SRMv1 endpoint not used anymore by CMS
- Overall reliability statistically insignificant (see CERN)



Conclusions on April results



- For three sites the reliability is not reliable
 - CERN, RAL: because CMS was not testing a service (SRM) which still had critical tests
 - Fixed from the end of April
 - FNAL: GridView seems to be picking up the wrong CEs
- SRMv2 should become a critical service in GridView
 - Otherwise SRM failures will not appear and all sites will look unrealistically good
- Reminder: many CMS tests do not affect the WLCG availability on purpose
 - e.g. cannot blame a site if some CMSSW version is missing, or if the Trivial File Catalogue has a typo



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