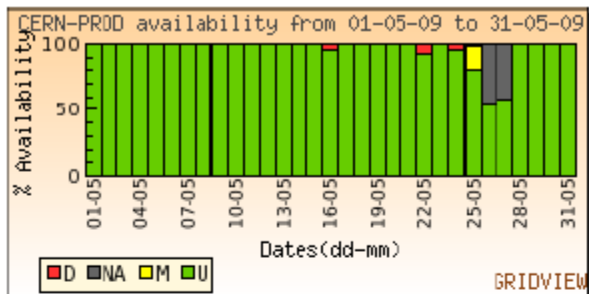
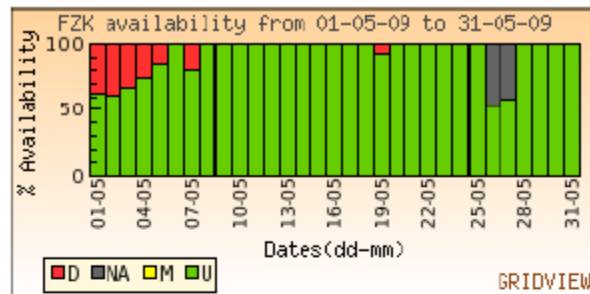


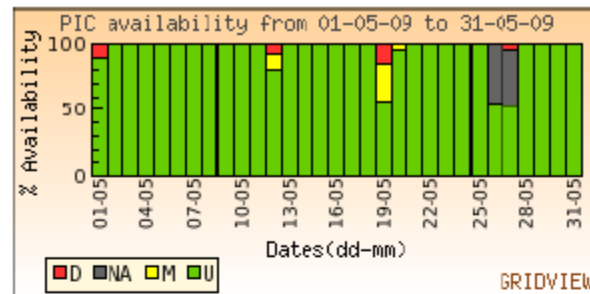
# CMS – May 2009 - Availability



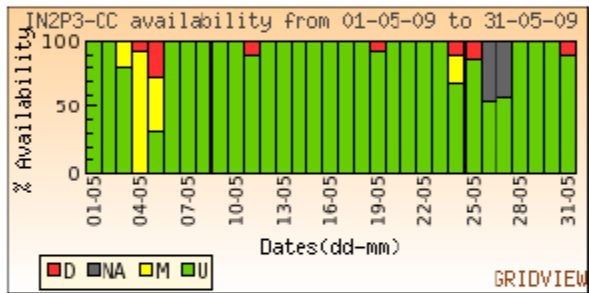
**CERN** Avail: 99 % Unkn: 3 %



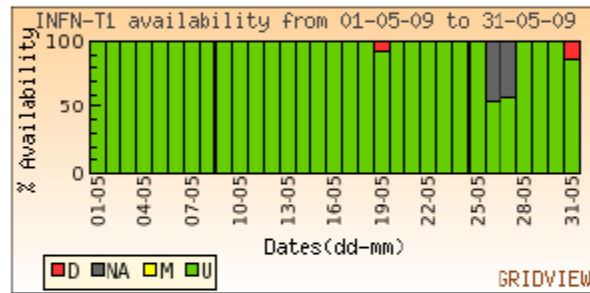
**DE-KIT** Avail: 94 % Unkn: 3 %



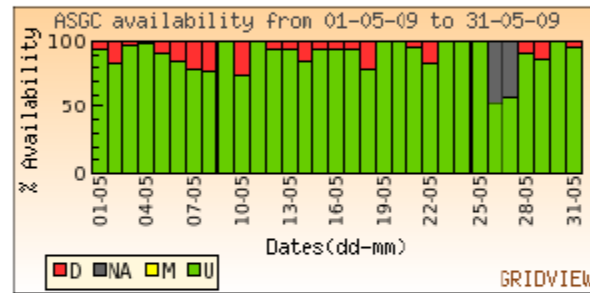
**ES-PIC** Avail: 97 % Unkn: 3 %



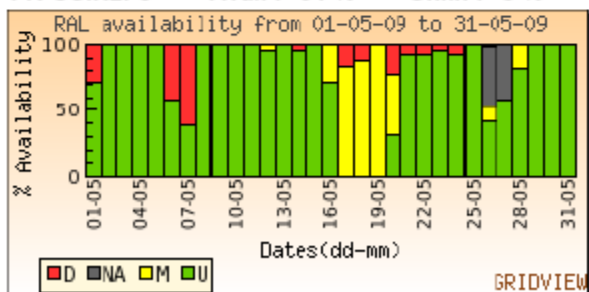
**FR-CCIN2P3** Avail: 91 % Unkn: 3 %



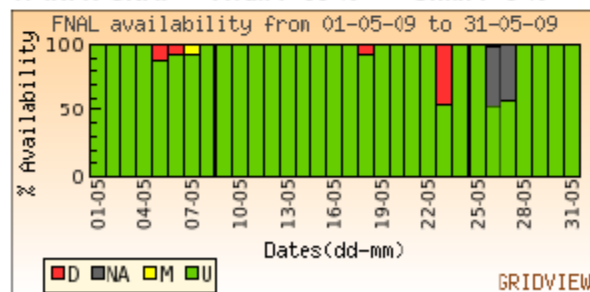
**IT-INFN-CNAF** Avail: 99 % Unkn: 3 %



**TW-ASGC** Avail: 92 % Unkn: 3 %



**UK-T1-RAL** Avail: 80 % Unkn: 3 %



**US-FNAL-CMS** Avail: 97 % Unkn: 3 %

Site	Date	Up Down	Comments
CERN	1		No significant issues.
DE-KIT	1-5	up	SRM tests failed because the disk-only area used also by SAM tests was filled by the CMS "backfill" jobs (fake production jobs).
ES-PIC	19	down	A network intervention required to switch off the site services. Some SAM CE test jobs failed due to the unavailability of the CEs.
FR- CCIN2P3	3-5, 24	down	Failure of the cooling system.
IT-INFN- CNAF			No significant issues.
TW-ASGC	~all	up	Frequent timeouts in SRM tests and SRM errors, probably all related to the infamous 'big ID' Oracle bug which affected CASTOR.
UK-T1-RAL	1	up	A SAM test job failed to run before proxy expiration. Probably related to a problem with the (shared) home dir of the cmsprd and cmssgm accounts.
	6-7	up	After moving to pool accounts for the production role, the SRM tests failed with "permission denied", as the new local user had no permission to write
	18-20	down	Hardware upgrade for the CASTOR database nodes, with an unscheduled extension. Some SRM failures shortly before and after the downtime.
	26-28	down	Network intervention.
US-FNAL- CMS	23	up	Timeouts of SRM tests and SRM unresponsive. Reason unknown.

# Downtimes and reliability

- It is evident from the Gridview plots that both **scheduled** and **unscheduled** downtimes appear in yellow and are taken into account in the **reliability** calculation
- Effect is an overestimate of the reliability
- **Is this a known issue?**

# Criticality of the CMS SAM tests

- The CMS SAM tests have **two** criticalities
  - The criticality in **FCR**, affecting the "WLCG" CMS availability as shown in the MB
  - The criticality in the **Dashboard**, affecting the "CMS" CMS availability as shown in CMS internal meetings
- **Why** two different criticalities?
  - For WLCG only tests whose failure is correlated to the **site** itself (e.g. SRM problems, CE problems)
  - For CMS also tests whose failure is correlated to **CMS** (e.g. local CMS, configuration files, lack of needed CMSSW releases, etc.)
- **Do not want to "blame" sites in a WLCG context for CMS mistakes!**

# Test summary table: CE

Only CE test critical for WLCG

Test name	Function	Critical for WLCG	Critical for CMS
CE-sft-job	Tests job submission via WMS with lcgadmin role	Y	Y
CE-cms-prod	Tests job submission via WMS with production role	N	Y
CE-cms-basic	Tests CMS local site configuration in software area	N	Y
CE-cms-swinst	Tests that all needed CMSSW releases are correctly installed and published	N	Y
CE-cms-mc	Tests the the local file stageout mechanism works	N	Y
CE-cms-squid	Tests that the local Squid server works	N	Y
CE-cms-frontier	Tests that calibration data can be downloaded from Frontier	N	Y
CE-cms-analysis	Tests that local data can be read by jobs	N	Y

# Test summary table: SRMv2

Only CE test critical for WLCG

Test name	Function	Critical for WLCG	Critical for CMS
SRMv2-get-pfn-from-tfc	Tests the LFN-to-PFN resolution mechanism for the endpoint	N	Y
SRMv2-lcg-cp	Tests that a file can be copied forth and back (and deleted) from the UI to the endpoint	Y	Y
SRMv2-lcg-ls	Tests that lcg-ls gives the correct output for a remote file	N	N
SRMv2-lcg-ls-dir	Tests that lcg-ls gives the correct output for a remote directory	N	N
SRMv2-lcg-gt	Tests that a good gsiftp TURL can be retrieved for a remote file	N	N
SRMv2-lcg-gt-rm-gt	As the former but additionally checks that a TURL cannot be retrieved after the file is removed	N	N
SRMv2-user	Tests that a user can write in the local /store/user area (in the CMS namespace)	N	N

# Other information

- All details are available at
  - <https://twiki.cern.ch/twiki/bin/view/CMS/SAMForCMS>
- For questions, contact Andrea Sciabà or Nicolò Magini