LHC*b* and site availability

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- **Sources of information**
  - dedicated jobs (SAM jobs)
    - ↗ check site capabilities
      - ■ SW repository access rights
      - ■ sgm account mapping
      - ■ platform, deployed middleware (lcg-utils version)
    - ↗ installs LHCb software
      - ■ from a list of current releases of applications
      - ■ installation on the SW repository (shared area)
    - ↗ runs test applications
      - ■ simulation, digitisation, reconstruction
      - ■ analysis
  - dedicated tests (cron jobs)
    - ↗ FTS transfers (full matrix)
    - ↗ SRM tests (response time)
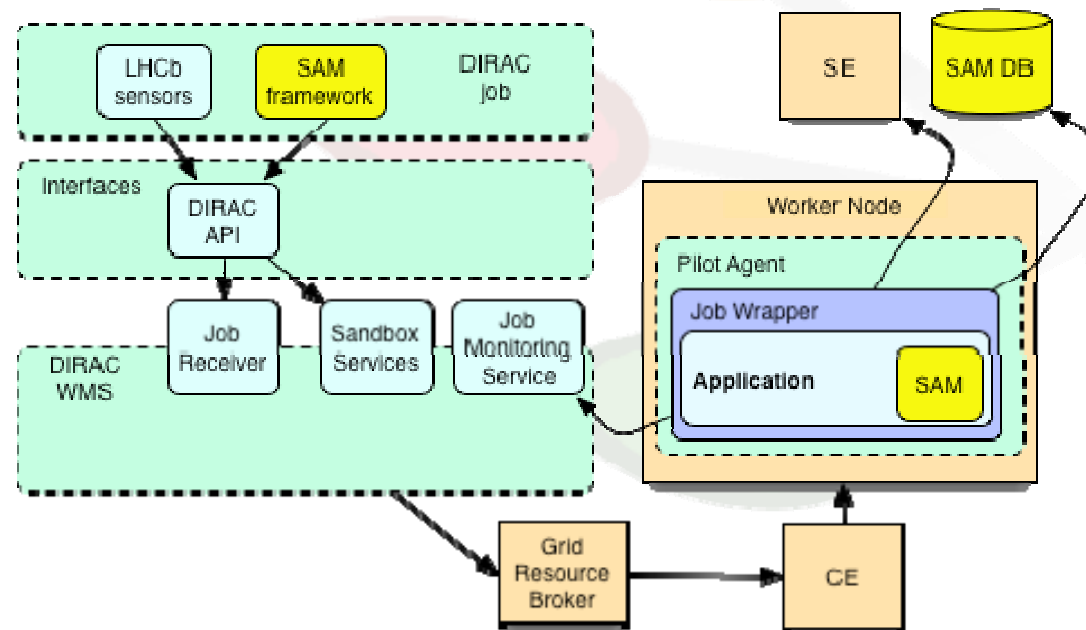 - information gathered by operations
    - ↗ SE performance (staging time, SRM response)
    - ↗ transfer error analysis

critical

not yet in production

- **Submitted through DIRAC**
  - target all CEs accepting LHCb jobs
  - reports to the SAM DB
  - uploads logfiles to the DIRAC log system

LHC*b* SAM CE test results

History

Logfile

	Tests Displayed
	lhcb

CE-apel-pub
CE-apel-sync
CE-apel-test
CE-cms-basic
CE-cms-cmsswver
CE-cms-dummy
CE-cms-frontier

show	stat	description	sum
☑	NA	no status available	0
☑	OK	normal status	50
☑	INFO	useful information	2
☑	NOTE	important information	0
☑	WARN	subject may fail soon	2

		lhcb tests
testname	desc	crit
LHCb CE-lhcb-install	LHCb SAM CE-lhcb-install	CT
LHCb CE-lhcb-job-Boole	LHCb SAM CE-lhcb-job-Boole	CT
LHCb CE-lhcb-job-Brunel	LHCb SAM CE-lhcb-job-Brunel	CT

No	Timestamp (submission time)	Status	lhcb					
			LHCb CE-lhcb-queues	LHCb CE-lhcb-job-Gauss	LHCb CE-lhcb-job-Brunel	LHCb CE-lhcb-job-Boole	LHCb CE-lhcb-install	LHCb CE-lhcb-os
1	03-Dec-2007 12:43:27	OK	na	na	ok	na	na	na
2	03-Dec-2007 12:43:22	OK	na	na	na	ok	na	na
3	03-Dec-2007 12:43:18	OK	na	ok	na	na	na	na
4	03-Dec-2007 12:43:13	OK	na	na	na	na	ok	na
5	03-Dec-2007 12:4							
6	03-Dec-2007 12:4							
7	01-Dec-2007 06:5							
8	01-Dec-2007 06:5							
9	01-Dec-2007 06:5							
10	01-Dec-2007 06:5							
11	01-Dec-2007 06:5							
12	01-Dec-2007 06:5							
13	30-Nov-2007 13:0							
14	30-Nov-2007 13:0							
15	30-Nov-2007 13:0							
16	30-Nov-2007 13:0							
17	30-Nov-2007 13:0							
18	30-Nov-2007 13:0							
19	30-Nov-2007 01:0							
20	30-Nov-2007 01:0							
21	30-Nov-2007 01:0							
22	30-Nov-2007 01:0							
23	30-Nov-2007 01:0							
24	30-Nov-2007 01:0							

```
*********************************
*  SAM / DIRAC Job OS Test v1.0  *
*********************************
-----------------------------------------------------------------------------
Voms proxy info:  subject   : /DC=ch/DC=cern/OU=Organic Units/OU=Users/CN=castella/CN=525694/CN=Gianluca
Castellani/CN=proxy/CN=proxy/CN=limited proxy
issuer     : /DC=ch/DC=cern/OU=Organic Units/OU=Users/CN=castella/CN=525694/CN=Gianluca Castellani/CN=proxy/CN=proxy
identity   : /DC=ch/DC=cern/OU=Organic Units/OU=Users/CN=castella/CN=525694/CN=Gianluca Castellani/CN=proxy/CN=proxy
type       : limited proxy
strength   : 512 bits
path       : /tmp/globus-tmp.td218.30664.0
timeleft   : 119:54:44
=== VO lhcb extension information ===
VO         : lhcb
subject    : /DC=ch/DC=cern/OU=Organic Units/OU=Users/CN=castella/CN=525694/CN=Gianluca Castellani
issuer     : /DC=ch/DC=cern/OU=computers/CN=lcg-voms.cern.ch
attribute  : /lhcb/Role=lcgadmin/Capability=NULL
attribute  : /lhcb/Role=NULL/Capability=NULL
timeleft   : 119:54:44

-----------------------------------------------------------------------------
Local Account Mapping:  uid=26001(lhsgm001) gid=50050(lhsgm) groups=1470(lhcb),50050(lhsgm)
-----------------------------------------------------------------------------
RPM for lcg_util:  1.5.2

-----------------------------------------------------------------------------
Running test job in /scratch2/pbs/3405925.pbs01.pic.es/globus-
tmp.td218.30664.0/WMS_td218_031136_https_3a_2f_2frb123.cern.ch_3a9000_2fx_5ff2awlB4bioyOQ7a3kOgw/work/117358
0  /bin/sh: edg-brokerinfo: command not found

0 ce07.pic.es

SAM Node Name is   ce07.pic.es
CMTCONFIG:  slc4_ia32_gcc34
```

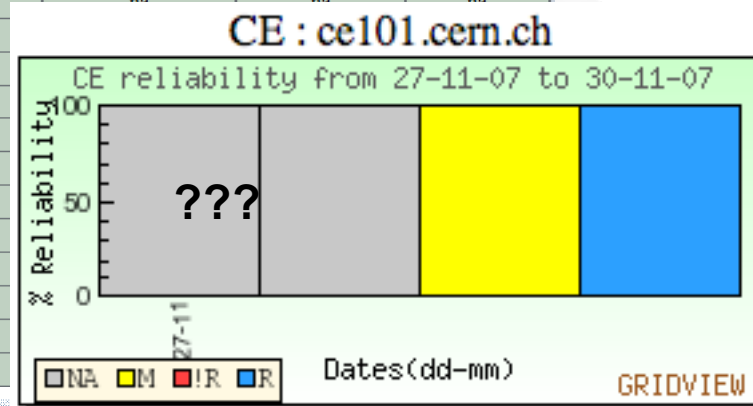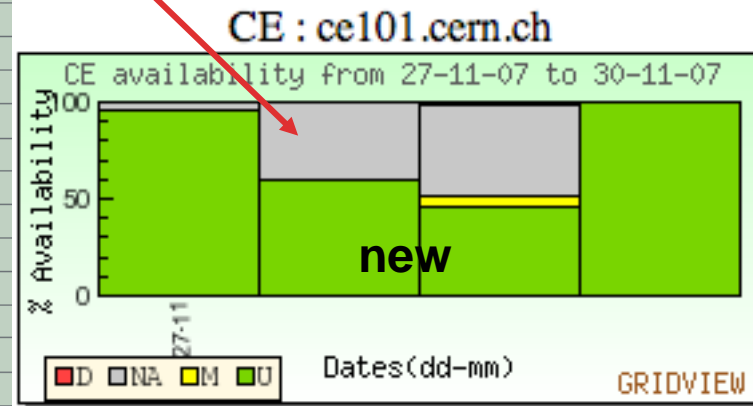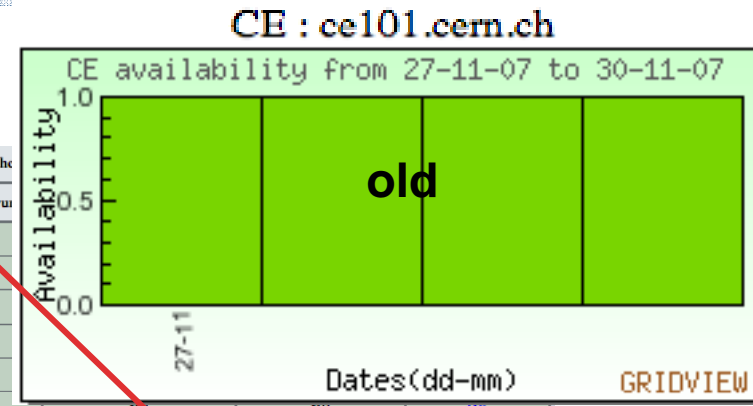| No		
1	South	
2	South	
3	South	
4	Cer	
5	Cer	
6		
7		
8		
9		
10		
11		
12		
13		
14		

Missing test on 28-11: state NA for 24h

No	Timestamp (submission time)	Status	LHCb CE-lhcb-queues	LHCb CE-lhcb-job-Gauss	LHCb CE-lhcb-job-Brun
1	30-Nov-2007 13:02:25	OK	na	na	ok
2	30-Nov-2007 13:02:23	OK	na	na	na
3	30-Nov-2007 13:02:20	OK	na	ok	na
4	30-Nov-2007 13:02:17	OK	na	na	na
5	30-Nov-2007 13:02:15	OK	ok	na	na
6	30-Nov-2007 13:02:13	OK	na	na	na
7	30-Nov-2007 01:05:51	OK	na	na	ok
8	30-Nov-2007 01:05:49	OK	na	na	na
9	30-Nov-2007 01:05:48	OK	na	ok	na
10	30-Nov-2007 01:05:46	OK	na	na	na
11	30-Nov-2007 01:05:45	OK	ok	na	na
12	30-Nov-2007 01:05:43	OK	na	na	na
13	29-Nov-2007 12:50:56	OK	na	na	ok
14	29-Nov-2007 12:50:54	OK	na	na	na
15	29-Nov-2007 12:50:52	OK	na	ok	na
16	29-Nov-2007 12:50:51	OK	na	na	na
17	29-Nov-2007 12:50:49	OK	ok	na	na
18	29-Nov-2007 12:50:47	OK	na	na	na
19	27-Nov-2007 14:22:20	OK	na	na	ok
20	27-Nov-2007 14:22:16	OK	na	na	na
21	27-Nov-2007 14:22:12	OK	na	ok	na
22	27-Nov-2007 14:22:07	OK	na	na	na
23	27-Nov-2007 14:22:03	OK	ok	na	na
24	27-Nov-2007 14:21:59	OK	na	na	na
25	27-Nov-2007 00:53:50	OK	na	na	ok
26	27-Nov-2007 00:53:46	OK	na	na	na
27	27-Nov-2007 00:53:43	OK	na	ok	na
28	27-Nov-2007 00:53:39	OK	na	na	na
29	27-Nov-2007 00:53:34	OK	ok	na	na
30	27-Nov-2007 00:53:29	OK	na	na	na

CE : ce101.cern.ch

CE availability from 27-11-07 to 30-11-07

old

CE : ce101.cern.ch

CE availability from 27-11-07 to 30-11-07

new

D NA M U

CE : ce101.cern.ch

CE reliability from 27-11-07 to 30-11-07

???

NA M !R R
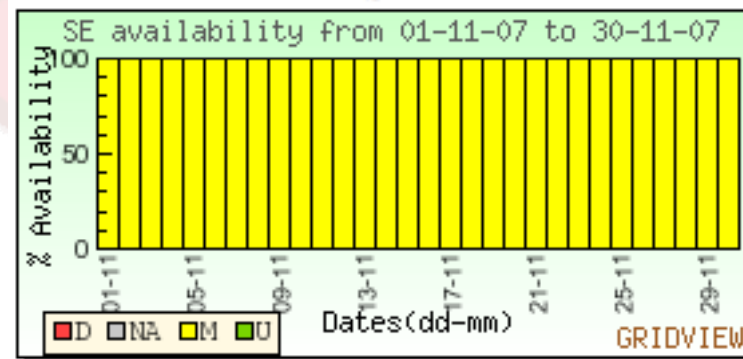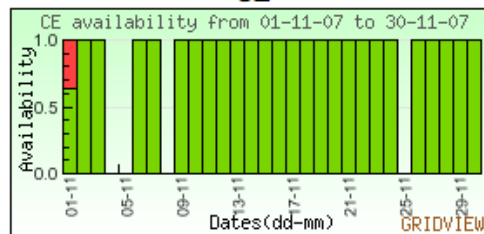
- **Currently only CE reports**
- **Have to fake "OK" results for SE and SRM (to be done)**
  - otherwise result is unpredictable (Alberto's plots)
  - sometimes information strange (not related to our tests)

old   **new**
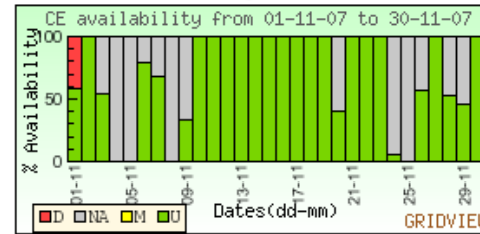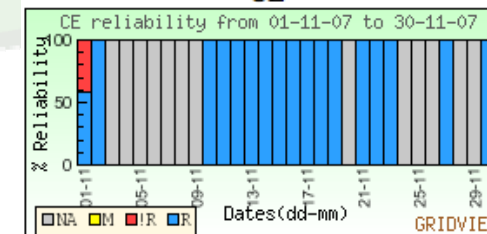
- **SAM-DB keeps knowledge of all past tests**
- **Clean-up needed!**
- **Have to simulate fake tests (OK) for missing tests**
  - rigid framework…

- **Latency problem:**
  - sometimes jobs take days to be submitted
  - result: n/a state
- **Problems on our side**
  - some errors are persistent
    - when installation fails, it is recurrent (SW should be properly un-installed)

SAM Storage tests (in preparation)

- Why are SE and SRM two different entities?
  - assume SRM is just the service (no data access)
  - SE is related to data access
- State of SE and SRM at a site should not be an "OR" of all instances
  - define VO-related critical services
  - make an "AND" of SE / SRM services
    - ↗ files are registered within an SE, not sufficient that one works
    - ↗ "OR" is OK for CEs provided they see the same batch system
- Sensors
  - SRM response time
  - FTS test transfers
  - Operations information
    - ↗ file access, staging, transfer errors

- ## FTS transfers

T1 to T1 channels status: FTS tests. Last update Tue Nov 27 16:51:45 2007							
SITE DESTINATION	**SITE SOURCE**						
	IN2P3	PIC	CNAF	RAL	SARA	FZK	CERN_TAPE
IN2P3	No LOG	log	log	log	log	log	log
PIC	log	No LOG	log	log	log	log	log
CNAF	log	log	No LOG	log	log	log	log
RAL	log	log	log	No LOG	log	log	log
SARA	log	log	log	log	No LOG	log	log
FZK	log	log	log	log	log	No LOG	log

- ## SRM response time

SRM health status : srm-get-metadata response time (secs). Last update Tue Nov 27 17:50:18 2007							
	IN2P3	PIC	CNAF	RAL	SARA	FZK	CERN
DISK	166	2	1	2	23	3	1
TAPE	150	2	1	4	3	3	2

Bad site

Good site

- **LHC*b* using SAM jobs**
  - report to SAM DB
  - used to istall SW and test site capabilities
- **… but ….**
  - a lot of effort needed for tuning test
  - interpreting results
  - logging information (logbook)
    - allowing monthly reports
    - history plots of critical test results would be very useful
      - as a service state is the "AND" of all tests
  - better flexibility from SAM framework needed
    - define logic (e.g. define critical services in addition to critical tests)
    - SE / SRM should be an "AND" of critical services
  - few cosmetics in GridView
    - define correctly Tier1s for a VO
    - ergonomics of the interface (but matter of taste!)