Service Availability Monitor tests for ATLAS

Current Status
Work in progress

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SAM Critical Tests: Current Status

Now running ATLAS specific tests together with standard OPS tests. All tests are using ATLAS credentials.

- Sites and endpoints definition:
    - **intersection between GOCDB and TiersOfATLAS (ATLAS specific sites configuration file with Cloud Model)**

- Different services and endpoints need to be tested using different VOMS credentials
    - ATLAS endpoints and paths must be explicitly tested
    - The LFC of the Cloud (residing in the T1) is used.

- FCR: No banning if sites are failing Critical Tests

Only Clouds using LFC are tested with ATLAS specific tests

SAM Critical Tests: Current Status - Storage Element

- ## SE & SRM (centrally from SAM UI):

  - SE-ATLAS-lcg-cr : copy and register (with the cloud LFC) a file from the SAM UI to the endpoint

    - For the Tier1s both Disk and Tape areas are tested

  - SE-ATLAS-lcg-cp: copy back the file from the SE to the UI. Verification of the integrity of the file copied.

  - SE-ATLAS-lcg-del: delete the files from the storage and from the LFC

SAM Critical Tests: Current Status - Computing Element

- CE (job submitted on the CE):
  - On all the ATLAS CE in production and certified (from the BDII):
    - keep on running part of the OPS suite:
      - Job Submission
      - Certification Authority version
      - VO software directory
    - ATLAS specific test:
      - ATLAS-vo-lcgTag: Check VO tag management (lcg-tags)
  - Only for ATLAS Tier1 and Tier2 (from the ToA):
    - Ganga Robot: Compile and execute a real analysis job based on a sample dataset.

Tests Displayed

atlas

- CE-ATLAS-GngRbt
- CE-ATLAS-sft-lcg-tag
- CE-ATLAS-sft-lcg-version
- CE-ATLAS-sft-vo-swspace
- CE-apel-pub
- CE-apel-sync
- CE-apel-test

☑ show atlas critical tests

Sort by: RegionName

ShowSensorTests

show	stat	description	sum
☑	NA	no status available	0
☐	OK	normal status	16
☑	INFO	useful information	0
☑	NOTE	important information	0
☑	WARN	subject may fail soon	67
☑	ERROR	subject has failed and problem is localized	134
☑	CRIT	subject has failed and problem is fatal	11
☐	MAINT	subject is under maintenance	30

atlas tests

testname	desc	crit
js	Job submission	CT
ca	CA certs version	CT
votag	VO Tag management	CT
swdir	VO software directory	CT
gng_rbt	Check ATLAS Ganga Robot results	CT
lcgtag	VO lcgTag list	
lcg-version	Test lcg-utils version on WN	
swdirspace	VO software directory	

SAM Critical Tests: Current Status - LFC & FTS

- LFC:
  - lfc ls: list entries in /grid/atlas
  - lfc wf: create an entry in the LFC

- FTS:
  - List FTS channels: glite-transfer-channel-list, Information System configuration and publication

Other SAM Tests

Many more tests are launched, i.e.:

- ATLAS-lcg-versions:
  - Check the version of lcg-utils running on the WNs

- ATLAS-swdirspace:
  - Check the dimension of the ATLAS sw installation area

Availability

- Tests Submission problems:
  - ✓ Migration of ATLAS tests into the SAM prod machines (done)
  - ✓ lock files "stucked" (now monitored with lemon sensor)
  - ✓ machines SL4 upgrade (done)
  - • big load on the machines (used also for other VOs, under investigation)
- BNL & NDGF: will be included soon (with their local LFC)
- ✓ CERN: VOTag errors on CEs (Solved)
- ✓ IN2P3: SE disappeared from the SAMDB (Solved)
- • RAL: GangaRobot errors (under investigation)
- ✓ SARA: SE tests problems (SAM side, old endpoint tested, to be fixed)

Tier-1/0 Site Availability VO:Atlas (Daily Report)
(Click on the Graph below to see Availability of Individual Services at the Site)
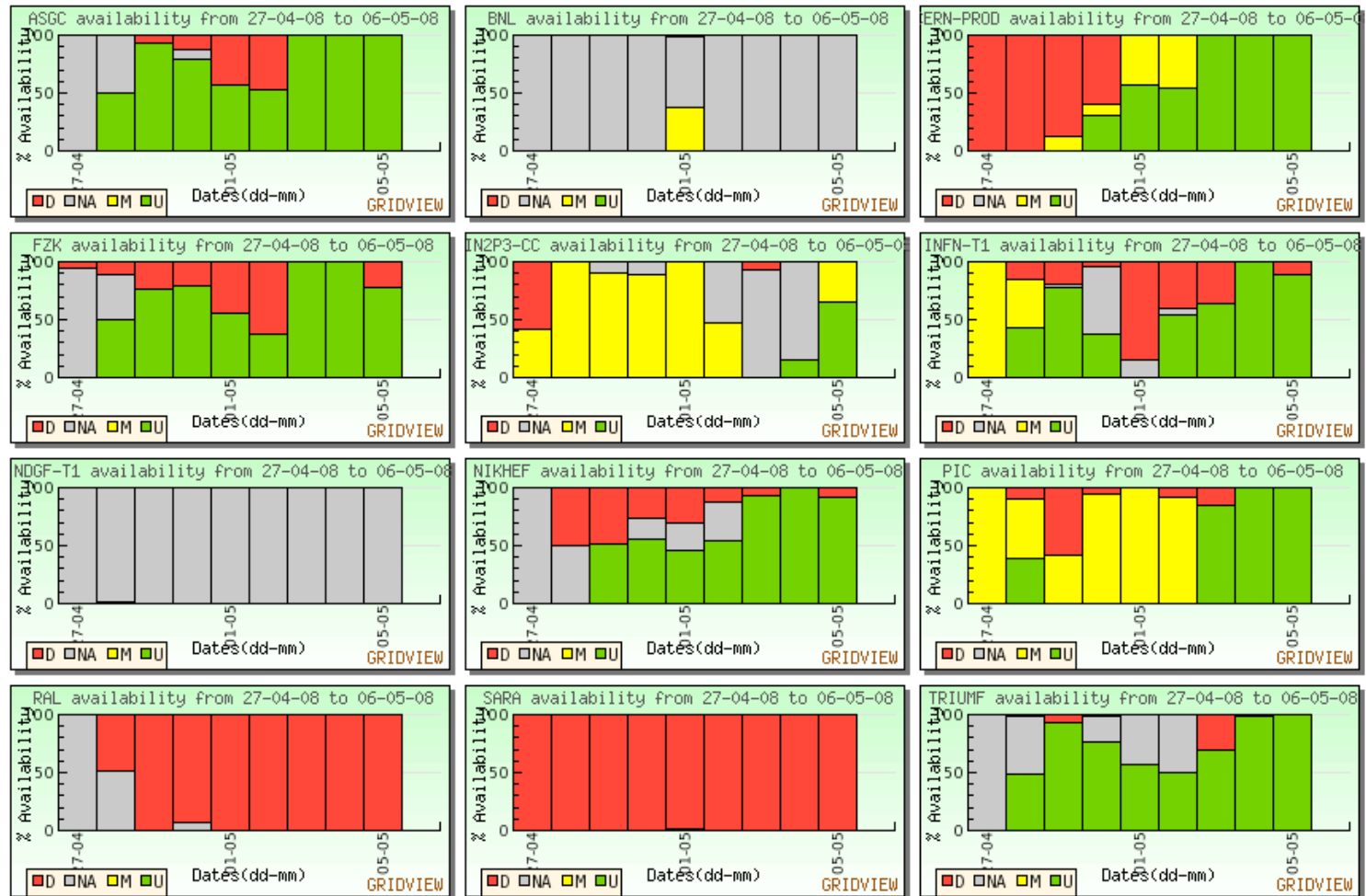
Work in progress

- Publication of SAM SE ATLAS critical results on the dashboard
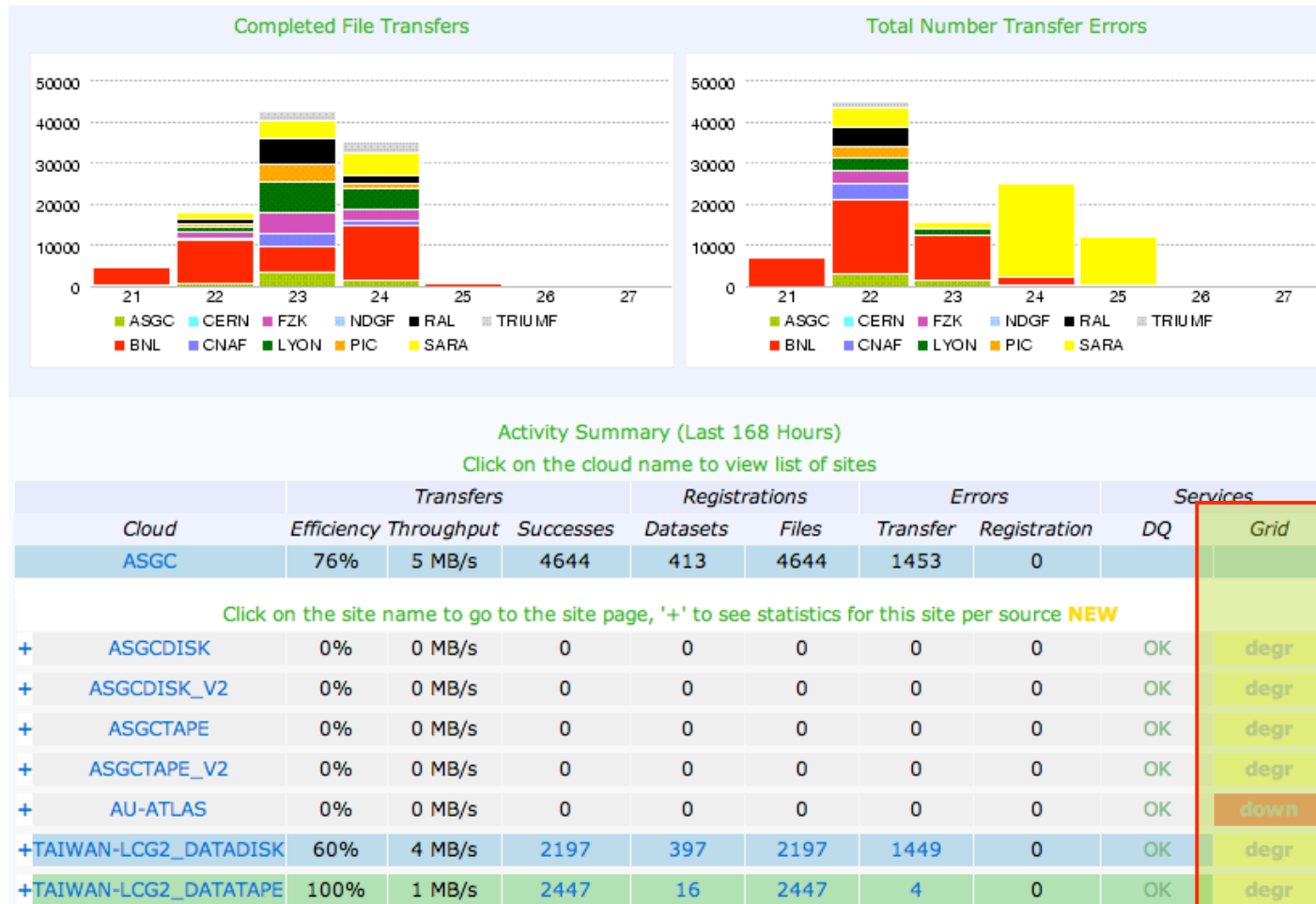
Work in progress

- *Desiderata* for the SAM developers:
  - Tier0/Tier1/Tier2 intrinsic differences
    - Increase site granularity in the SAM DB not to mix results
    - More flexibility to set critical tests

- SE: SRM2 tests for each space token of each endpoint
  - Tests already developed, to be integrated in the framework

- CE:
  - Increase the GangaRobot granularity
  - Retrieve Panda production system information

- CVS and Documentation

Work in progress

- ## New GUI for SAM test for ATLAS:

  - General solution for VO-specific SAM display, i.e. immediately usable for the other VO (extending/improving early prototype for CMS)

Backup slides

- …

Site Availability: T0/T1

♣ **Site Services Availability:**

- ♠ Site Services X = CE, SE, SRM
    - ◆ Down: if all services of type X of a site are Down
    - ◆ Ok: if all services of type X are Ok
    - ◆ Degraded: if some services of type X are Ok and other are Down
- ♠ Site BDII: Ok or Down by taking the status of the site BDII instance

♣ **Site Availability:**

- ♠ The AND of each single Site Services Availability

Tier-1/0 Site Availability VO:Atlas (Current Status)
(Click on the Graph below to see Availability of Individual Services at the Site)

Site Availability: one example

6 May 2008
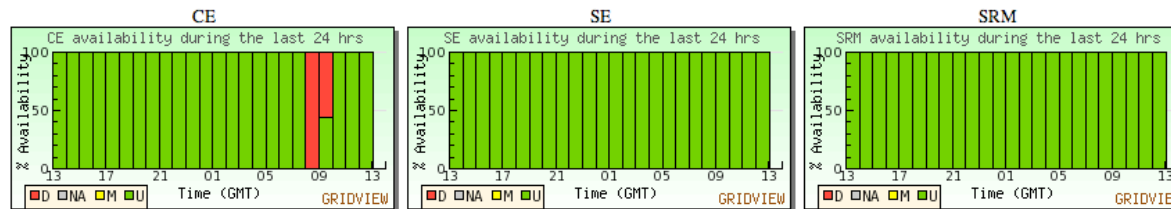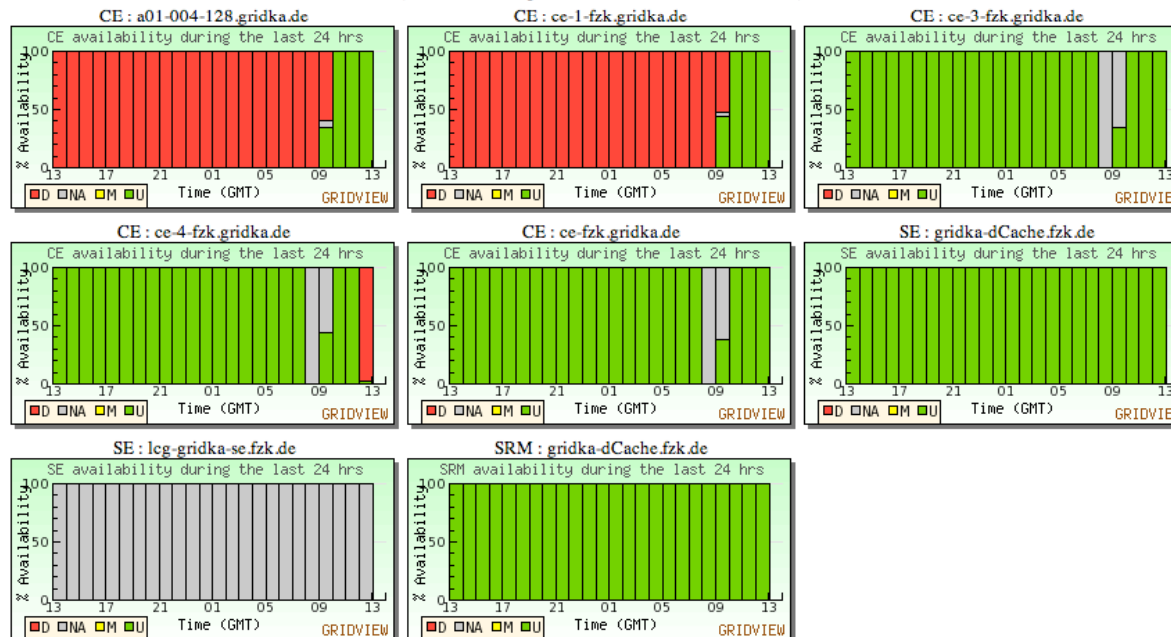
SAM results on Gridmap

Topology:

ℵ Possibility to include ATLAS Cloud view,

ℵ Possibility to change the metrics for the sites size

The collaboration with the Gridmap developers is already started

GridMap Prototype – Visualizing the "State" of the Grid

Latest SAM results, SE Status, for 'Atlas' VO, 03 Dec 2007 17:46 GMT.
Size of site rectangles is number of CPUs from BDII.
Certified Production sites, grouped by regions.
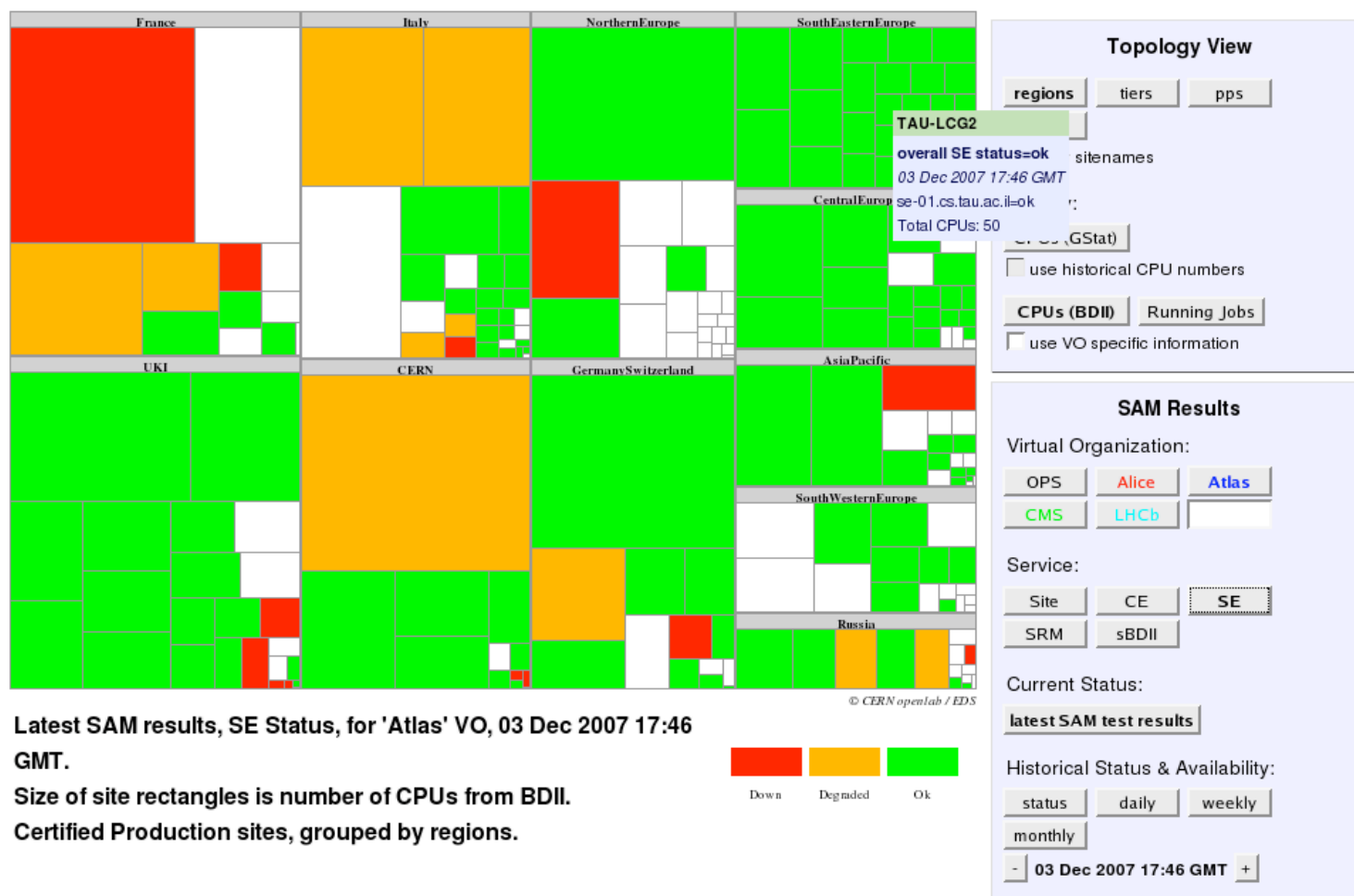
SAM results on CCRC08 Gridmap

Test Status (live data)

Atlas Critical Services

DDM central services	VOMS server	Distributed production servers	FTS	Castor internal data movement	TagCollector	LFC (Tier0)
Oracle database RAC (online, ATONR)	Data transfer from Point1 to Castor	Oracle database RAC (offline, ATLR)	Dashboard	SE (Tier1)	Log file server	gLite WMS / CE (Tier2)
	Tier-0 processing farm	Online-offline database connectivity	AMI catalog	CVS server	SE (Tier2) / Tag Collector / Oracle database RAC	
LFC (Tier1)	FTS (Tier1)	VOBOX (Tier0)	VOBOX (Tier1)	3D streaming (Tier0) / SE (Tier0)	Build and RTT system / CE (CAF)	CE (Tier1) / AFS Servers

openlab / EDS

VOBOX (Tier0)
Criticality level: 7
28 Apr 2008 15:35 GMT
Sites with SAM VOBOX test results: 0%

CERN-PROD   no test results

0% 25% 50% 75% 100% no

CERN-PROD | TRIUMF-LCG2 | IN2P3-CC | FZK-LCG2 | INFN-T1 | SARA-MATRIX
NDGF-T1 | pic | Taiwan-LCG2 | RAL-LCG2 | BNL-LCG2 | USCMS-FNAL-WC1