

WLCG Site Monitoring Migration

MONIT Team

Overview

- Migration of WLCG Site Monitoring (*SAM3*) to MONIT
- **No changes** from WLCG Management / Site Admins perspective
 - Same ETF test and Alice tests
 - Same profiles (aggregation logic)
 - Same PDF report output
- Just a different infrastructure handling the data

MONIT Site Monitoring

- Based on MONIT infrastructure
 - Test results from ETF + Alice
 - Enriched using VOFeed data
- Dashboards
 - In MONIT Grafana WLCG organization
 - Latest Tests
 - Historical Profiles / Tests
- Reports
 - Generated monthly and send to WLCG
 - All_Sites, Tier1_History, Tier1_Summary, Tier1_VO

SiteMon Homepage

<http://cern.ch/monit-wlwg-sitemon>

WLCG SITEMON Dashboards Reports Profiles Recomputations



WLCG SITEMON
Monitoring for the WLCG Sites Infrastructure



Dashboards

WLCG MONIT dashboards



Reports

WLCG site availability and reliability reports



Profiles

Check the current active profiles



Recomputations

Take a look at how to send corrections for the site results

Profiles

Here is the list of the available profiles, to request a new one please send us a [SNOW Ticket](#)

Profile Name	VO	Algorithm
ATLAS_CRITICAL	atlas	((CREAM-CE or ARC-CE or HTCONDOR-CE or GLOBUS) and ((SRMv2) or (SRM) or (GRIDFTP)))
CMS_CRITICAL	cms	((CREAM-CE or ARC-CE or HTCONDOR-CE) and (SRM))
LHCB_CRITICAL	lhcb	((CREAM-CE or ARC-CE or HTCONDOR-CE or VAC) and (SRMv2))
ALICE_CRITICAL	alice	((ARC-CE or CREAM-CE or HTCONDOR-CE) and (AliEn-SE) and ((ARC-CE or CREAM-CE or HTCONDOR-CE) or ((AliEn-CE) and (AliEn-VoBox-Test))))

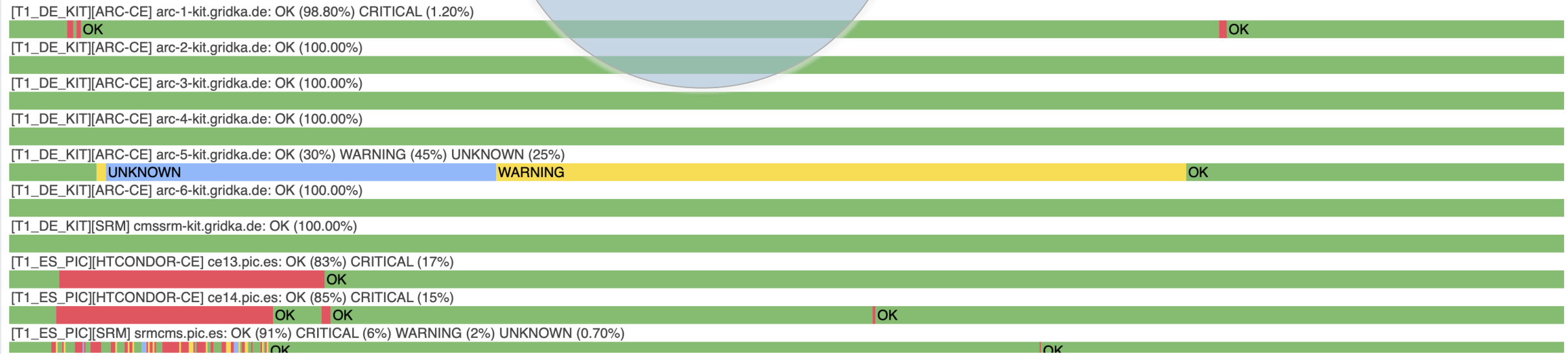
Dashboards

- Available from **MONIT Grafana WLCG** organization
- **Historical Profiles**
 - Status information for each site/service
 - Stats info plots help identifying low availability/reliability
 - Plot annotations about recomputation requests start/end interval
- **Historical Tests**
 - Overview / Details of the all received ETF and Alice test
- **Latest Tests**
 - Overview / Details of the last received test result per site/service and metric
- Data retention:
 - site/service availability and reliability (% per hour) kept forever
 - site/service status (OK, CRITICAL, etc) kept for 1 year
 - raw test results kept for 1 year

▼ Sites



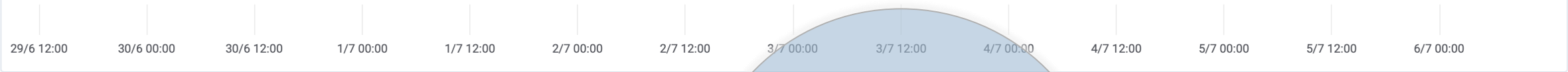
▼ Endpoints



VO cms Country All Federation All Tier 1 Site All Flavour All Profile CMS_CRITICAL Hostname All
 Recomputations Start Recomputations End

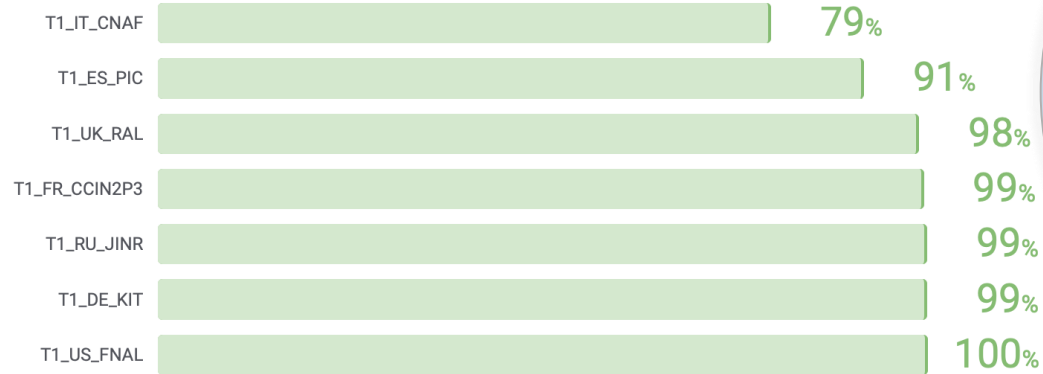
More Dashboards Website

Recomputations

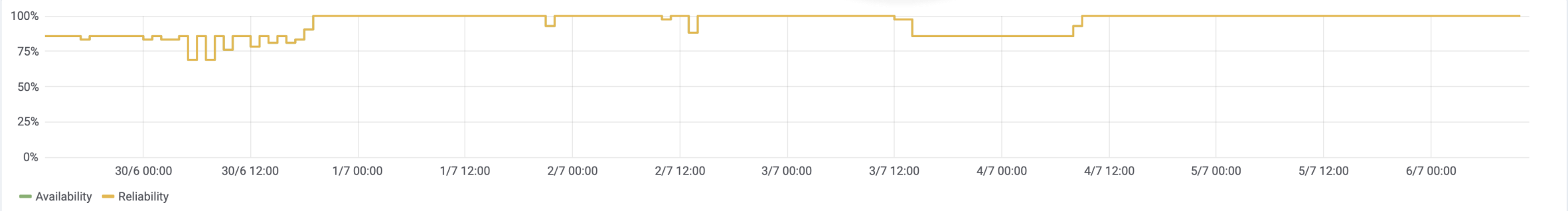
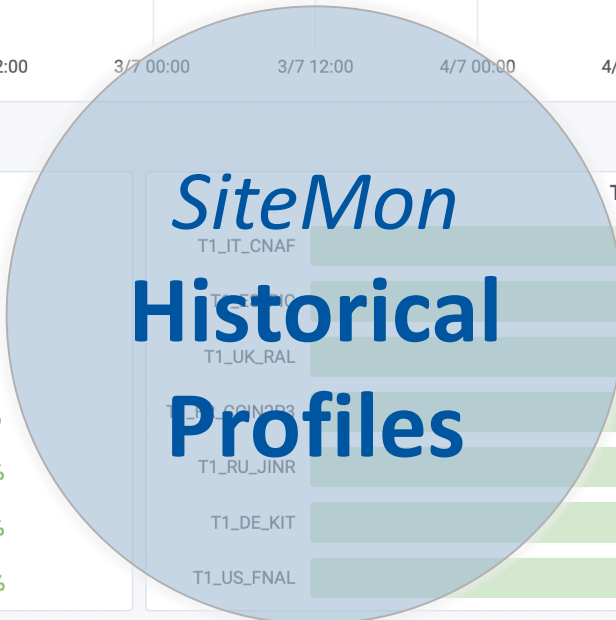


Stats

Top10 Lower Availability



Top10 Lower Reliability

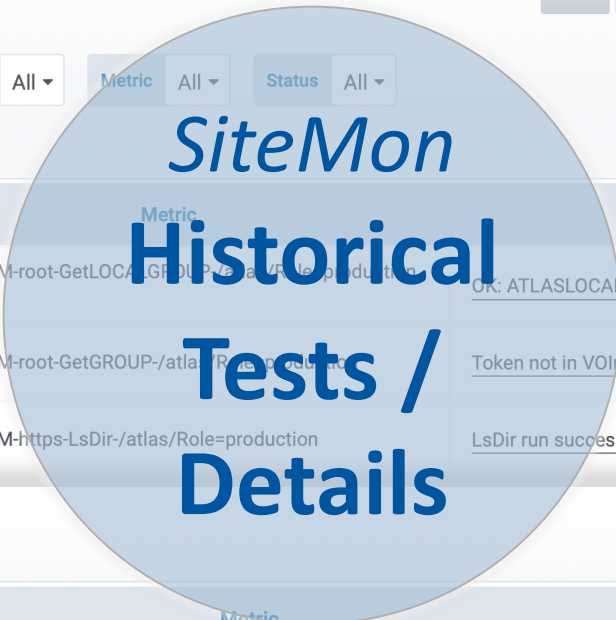


VO atlas Tier 1 Country All Federation All Site All Flavour All Hostname All Metric All Status All

More Dashboards Website

Tests

Timestamp	Site	Flavour	Hostname	Metric	Summary	Status
2020-07-05 12:59:47	UNKNOWN	XROOTD	lcg-dp4.sfu.computecanada.ca	org.atlas.DDM-root-GetLOCALGROUP/...	OK: ATLASLOCALGROUPDISK: File successfully fetched	OK
2020-07-05 12:59:47	UNKNOWN	XROOTD	lcg-dp4.sfu.computecanada.ca	org.atlas.DDM-root-GetGROUP-/atlas/Role=production	Token not in VOInfoDictionary, dummy test successful!	OK
2020-07-05 12:59:46	UNKNOWN	WEBDAV	dav.ndgf.org	org.atlas.DDM-https-LsDir-/atlas/Role=production	LsDir run successfully on all tokens!	OK



SiteMon > WLCG SiteMon Test Details

Timestamp	Site	Flavour	Hostname	Metric	Status	Summary
2020-07-05 12:59:46	UNKNOWN	WEBDAV	dav.ndgf.org	org.atlas.DDM-https-DelSCRATCH-/atlas/Role=production	WARNING	WARNING: ATLASCRATCHDISK: Preliminary file copy failed

Details

Del in ATLASCRATCHDISK @ 2020-07-05T10:59:46Z
 No deletion for token, preliminary file copy failed. gfal2 message:
 [gfalt_copy_file][perform_copy] TRANSFER [gfalt_http_copy] ERROR: Copy failed with mode streamed, with error: [davix2gliberr] Authentication error, reached maximum number of attempts

2020-07-05 12:59:43	RAL-LCG2	ARC-CE	arc-ce03.gridpp.rl.ac.uk	org.sam.CONDOR-JobSubmit-/atlas/Role=lcgadmin	OK: COMPLETED.	OK
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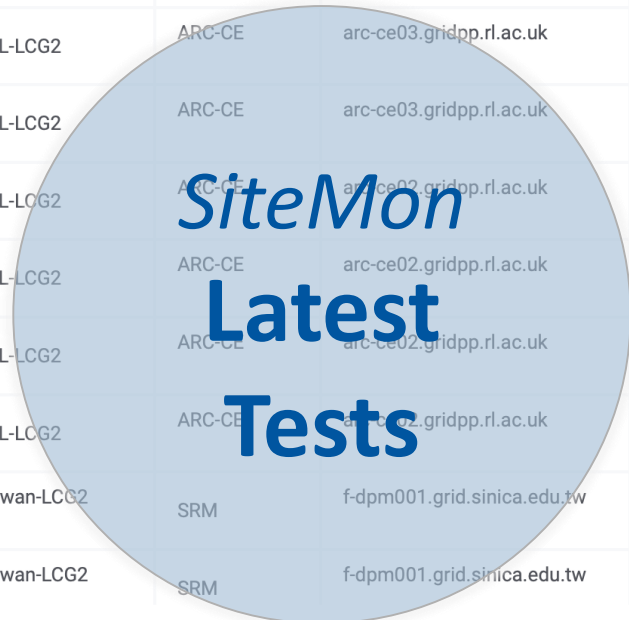
1 2 3 4 5 6 7 8 9

VO atlas Tier 1 Country All Federation All Site All Flavour All Hostname All Metric All Status All

More Dashboards Website

Sites 13	Flavours 8	Hostnames 64	Metrics 81
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Timestamp	Site	Flavour	Hostname	Metric	Summary	Status
2020-07-05 12:59:43	RAL-LCG2	ARC-CE	arc-ce03.gridpp.rl.ac.uk	org.atlas.WN-swspace-/atlas/Role=lcgadmin	atlassgm-6990965.0-lcg2051.gridpp.rl.ac.uk: OK	OK
2020-07-05 12:59:43	RAL-LCG2	ARC-CE	arc-ce03.gridpp.rl.ac.uk	org.sam.CONDOR-JobSubmit-/atlas/Role=lcgadmin	OK: COMPLETED.	OK
2020-07-05 12:59:43	RAL-LCG2	ARC-CE	arc-ce03.gridpp.rl.ac.uk	org.atlas.WN-cvmfs-/atlas/Role=lcgadmin	atlassgm-6990965.0-lcg2051.gridpp.rl.ac.uk: OK	OK
2020-07-05 12:59:43	RAL-LCG2	ARC-CE	arc-ce03.gridpp.rl.ac.uk	org.atlas.WN-FrontierSquid-/atlas/Role=lcgadmin	atlassgm-6990965.0-lcg2051.gridpp.rl.ac.uk: WARNING	WARNING
2020-07-05 12:59:37	RAL-LCG2	ARC-CE	arc-ce03.gridpp.rl.ac.uk	org.atlas.WN-FrontierSquid-/atlas/Role=lcgadmin	atlassgm-6740569.0-lcg2393.gridpp.rl.ac.uk: WARNING	WARNING
2020-07-05 12:59:37	RAL-LCG2	ARC-CE	arc-ce02.gridpp.rl.ac.uk	org.atlas.WN-swspace-/atlas/Role=lcgadmin	atlassgm-6740569.0-lcg2393.gridpp.rl.ac.uk: OK	OK
2020-07-05 12:59:37	RAL-LCG2	ARC-CE	arc-ce02.gridpp.rl.ac.uk	org.atlas.WN-cvmfs-/atlas/Role=lcgadmin	atlassgm-6740569.0-lcg2393.gridpp.rl.ac.uk: OK	OK
2020-07-05 12:59:37	RAL-LCG2	ARC-CE	arc-ce02.gridpp.rl.ac.uk	org.sam.CONDOR-JobSubmit-/atlas/Role=lcgadmin	OK: COMPLETED.	OK
2020-07-05 12:59:31	Taiwan-LCG2	SRM	f-dpm001.grid.sinica.edu.tw	org.atlas.DDM-srm-Put-/atlas/Role=production	Put run successfully on all tokens!	OK
2020-07-05 12:59:31	Taiwan-LCG2	SRM	f-dpm001.grid.sinica.edu.tw	org.atlas.DDM-srm-LsDir-/atlas/Role=production	LsDir run successfully on all tokens!	OK



1 2 3 4 5 6 7

Reports

- Output format
 - PDF, JSON
 - Agreed to drop unused HTML and invalid CSV
- UNKNOWN status
 - In the old infrastructure missing data was replaced by OK
 - Leading to availabilities of $>100\%$ in SAM3
 - ex. (OK: 100%, UNKNOWN: 4%)
 - Main source of difference between new SiteMon and SAM3
 - Results can be “fixed” in new infrastructure with a recomputation



Availability of WLCG Tier-0 + Tier-1 Sites ATLAS

June 2020



Site Availability of WLCG Tier-0 + Tier-1 Sites ALICE

Jan-2020

Target Availability for each site is 97.0%. Target for 8 best sites is 98.0%

Target Availability for each site is 97.0%.

Colors: Red <90% Orange <97% Green >= 97%

Availability Algorithm: (CREAM-CE + ARC-CE + HTCNDOR-CE + GLOBUS) * (all SRMv2 + all SRM + all GRIDFTP)

Availability Algorithm: @ALICE_CE * @ALICE_VOBOX * all Alien-SE



SiteMon Reports

Availability of WLCG Tier-0 + Tier-1 Sites CMS

June 2020

Target Availability for each site is 97.0%. Target for 8 best sites is 98.0%

Availability Algorithm: (CREAM-CE + ARC-CE + HTCNDOR-CE) * all SRM



T0_CH_CERN Avail: 99% Unkn: 0% **T1_DE_KIT Avail: 100% Unkn: 0%** **T1_ES_PIC Avail: 96% Unkn: 0%** **T1_FR_CCIN2P3 Avail: 95% Unkn: 0%**

T1_IT_CNAF Avail: 97% Unkn: 0% **T1_RU_JINR Avail: 100% Unkn: 0%** **T1_UK_RAL Avail: 96% Unkn: 0%** **T1_US_FNAL Avail: 100% Unkn: 0%**

Tier-2 Avail
Federation
Availability Algorithm:
Color coding:

Federation	Availability	Reliability
AT-HEPHY-VIENNA-UIBK	73%	78%
BE-TIER2	98%	98%
BR-SP-SPRACE	97%	97%
CH-CERN	100%	100%
CH-CHIPP-CSCS	100%	100%
CN-IHEP	100%	100%
DE-DESY-RWTH-CMS-T2	95%	95%
EE-NICPB	95%	95%
ES-CMS-T2	100%	100%
FI-HIP-T2	82%	83%
FR-GRIF	100%	100%
FR-IN2P3-CC-T2	88%	89%
FR-IN2P3-IPHC	99%	99%
GR-Ioannina-HEP	95%	95%
HU-HGCC-T2	99%	99%
IN-INDIACMS-TIFR	83%	100%
IT-INFN-T2	92%	92%
KR-KISTI-GSDC-02	99%	99%

T2-LATINAMERICA	Availability	Reliability
T2_US_Caltech	99%	99%
T2_US_Florida	99%	99%
T2_US_MIT	96%	96%
T2_US_Nebraska	94%	94%
T2_US_Purdue	100%	100%
T2_US_UCSD	92%	92%
T2_US_Wisconsin	96%	96%
TR-Tier2-federation	85%	85%
TW-CMS-T2	98%	98%
UA-Tier2-Federation	99%	100%
UK-London-Tier2	75%	75%
UK-SouthGrid	96%	97%

	32300	2700	Availability History			
			Mar-2020	Apr-2020	May-2020	
CA-EAST-T2	32300	2700				
CA-WATERLOO-T2			12%	12%	35%	97%
CA-WEST-T2	32300	2700				
CA-SFU-T2			4%	4%	0%	97%
CA-VICTORIA-WESTGRID-T2			98%	98%	0%	78%
CH-CHIPP-CSCS	106000	2910				
CSCS-LCG2			99%	99%	0%	96%
UNIBE-LHEP			54%	54%	0%	98%
CH-CHIPP-CSCS	8000	400				
CH-CHIPP-CSCS			99%	99%	0%	83%
CH-CHIPP-CSCS			54%	54%	0%	83%

Date	CERN	CCIN2P3	CNAF	FZK	KISTI_GSDC	NDGF-T1	NINDEF	RAL	RRC_KI-T1	SAMA	Average
	Avail/Unkn	Avail/Unkn	Avail/Unkn	Avail/Unkn	Avail/Unkn	Avail/Unkn	Avail/Unkn	Avail/Unkn	Avail/Unkn	Avail/Unkn	Avail/Unkn
01-01	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
01-02	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
01-03	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
01-04	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
01-05	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
01-06	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
01-07	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
01-08	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
01-09	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
01-10	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
01-11	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
01-12	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
02-01	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
02-02	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
02-03	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
02-04	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
02-05	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
02-06	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
02-07	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
02-08	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
02-09	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
02-10	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
02-11	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
02-12	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
03-01	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
03-02	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
03-03	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
03-04	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
03-05	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
03-06	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
03-07	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
03-08	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
03-09	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
03-10	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
03-11	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
03-12	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
04-01	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
04-02	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
04-03	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
04-04	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
04-05	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
04-06	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
04-07	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
04-08	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
04-09	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
04-10	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
04-11	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
04-12	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
05-01	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
05-02	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
05-03	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
05-04	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
05-05	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
05-06	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
05-07	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
05-08	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
05-09	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
05-10	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
05-11	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
05-12	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
06-01	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
06-02	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
06-03	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
06-04	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
06-05	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
06-06	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
06-07	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
06-08	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
06-09	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
06-10	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
06-11	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
06-12	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
07-01	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
07-02	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
07-03	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
07-04	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
07-05	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
07-06	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
07-07	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
07-08	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
07-09	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
07-10	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
07-11	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
07-12	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

June 2020

SRM

Profiles

- Managed internally by the MONIT team
- Good opportunity to clean legacy profiles
- VO critical profiles initially added by MONIT
- More profiles have been already added on request

Profile Name	VO	Algorithm
ATLAS_CRITICAL	atlas	((CREAM-CE or ARC-CE or HTCONDOR-CE or GLOBUS) and ((SRMv2) or (SRM) or (GRIDFTP)))
CMS_CRITICAL	cms	((CREAM-CE or ARC-CE or HTCONDOR-CE) and (SRM))
CMS_CRITICAL_FULL	cms	((CREAM-CE or ARC-CE or HTCONDOR-CE) and (SRM) and (XROOTD))
CMS_FULL	cms	((CREAM-CE) and (ARC-CE) and (HTCONDOR-CE) and (VAC) and (SRMv2))
LHCB_CRITICAL	lhcb	((CREAM-CE or ARC-CE or HTCONDOR-CE or VAC) and (SRMv2))
ALICE_CRITICAL	alice	((ARC-CE or CREAM-CE or HTCONDOR-CE) and (AliEn-SE) and ((ARC-CE or CREAM-CE or HTCONDOR-CE) or ((AliEn-CE) and (AliEn-VoBox-Test))))

- Please open a SNOW ticket for further missing profiles

Recomputations

- Managed by Experiment representatives
- Based on Gitlab, one simple json doc per request
 - Added new option to create VO-wide requests
 - Built-in tracking of requests history
 - Detailed documentation provided in the repository

```
{ "vo": "atlas",  
  "dst_experiment_site": "IN2P3-LAPP",  
  "periods": [  
    { "start_time": "2019-12-01 12:00:00",  
      "end_time": "2019-12-01 12:13:00",  
      "status": "DOWNTIME" }  
  ]  
}
```

S **site-monitoring-recomputations**  Project ID: 75188

  Star 0  Fork 0

70 Commits 11 Branches 0 Tags 532 KB Files 1,019 KB Storage

This project contains the site monitoring recomputation requests

master site-monitoring-recomputations / + Clone

 **Correction for the RAL production CEs accidentally absent from the VO feed.**
Maarten Litmaath authored 3 days ago 5cea7052

 README  CI/CD configuration  Add LICENSE  Add CHANGELOG  Add CONTRIBUTING

 Add Kubernetes cluster

Name master site-monitoring-recomputations / alice / 2020 / 06 / RAL.json


alice/2020


atlas/2020

cms/2020

example/2019/

lhcb/2020

 **Correction for the RAL production CEs accidentally absent from the VO feed.**
Maarten Litmaath authored 3 days ago

 **RAL.json** 307 Bytes 

```

1  {
2    "vo": "alice",
3    "dst_experiment_site": "RAL",
4    "periods": [
5      {
6        "start_time": "2020-06-12 00:00:00",
7        "end_time": "2020-06-20 16:00:00",
8        "status": "OK"
9      },
10     {
11       "start_time": "2020-06-21 08:00:00",
12       "end_time": "2020-06-30 23:59:59",
13       "status": "OK"
14     }
15   ]
16 }
```

SiteMon Recomput Repo

Site Monitoring Recomputations repository

This repository proceeds and keeps track of SAM3 recomputation requests

Steps to follow in order to create a SAM3 correction request

- Create a JSON file containing an information about the VO, site name and time window you want to correct. This file must respect the following requirements:
 - to be stored under the corresponding directory structure: "VO/year/month"
 - to be named after the sitename you want to recompute: [site name].json
 - to be a valid JSON file
 - to provide the start/end timestamp values (within the month specified in the path)

maintain the following fields: vo, dst_experiment_site, periods :{ start_time, end_time, status }

make sure status is one of: OK, WARNING, CRITICAL, DOWNTIME, UNKNOWN

example content: atlas/2019/08/IN2P3-LAPP.json

```

{
  "vo": "atlas",
  "dst_experiment_site": "IN2P3-LAPP",
  "periods": [
    {
      "start_time": "2019-12-01 12:00:00",
      "end_time": "2019-12-01 12:13:00",
      "status": "DOWNTIME"
    },
    {
      "start_time": "2019-12-20 12:00:00",
      "end_time": "2019-12-22 12:13:00",
      "status": "OK"
    }
  ]
}
```

Status

- ✓ **Implement SiteMon availability / reliability computation**
 - Recomputation and downtime integration
 - Dashboards creation in Grafana WLCG organisation
 - Report generation
- ✓ **Presenting to WLCG coordination meeting**
 - Presentation delivered on 17 March 2020
 - Status update delivered on 2 July 2020
- ✓ **Deliver SiteMon reports in parallel to the SAM3**
 - Already covered May and June reports
 - Reports also sent to site managers
- ✓ **Collect and implement feedback**
 - Dedicate meeting with each VO representatives
 - Have been working on users feedback implementation for the last months

Status

- ✓ VO wide recomputations
- ✓ Visual representation of corrected time window
- ✓ Provide availability/reliability plots
 - Can be used to see statistics per VO, federation, site...
- ✓ Drilldown functionality
 - Adapt Grafana plugin to provide it
 - Already developed and tested / to be delivered this week
- ◆ Visual representation of test validity
- ◆ Import historical data used in the reports

New features

- Extra UI drilldown functionality
 - Zoom-in on the selected status time window
- Time-based VOFeed calculations
 - Uses VO feed data at the time of the event
 - Results in correct status in case of replaced services

Migration plan

- **July**

- 03:** Draft reports for *June* from **SAM3** and **SiteMon** infrastructure

- 16:** Final reports for *June* from **SAM3** infrastructure

- **August**

- 03:** Draft reports for *July* from **SiteMon** infrastructure

- 17:** Final reports for *July* from **SiteMon** infrastructure

- 17:** Stop old dashboards but keep infrastructure running

- **September**

- 31:** Retire the old infrastructure (dashboards and reports)

Thank you !

<http://cern.ch/monit-support>