
Site Sonar - WLCG Monitoring Tool



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Project Objective

Create a framework for collecting, storing and querying information of computing nodes across ALICE Grid Sites in the WLCG

How It Works

- Run a single job across all the Grid sites
- Collect the job results to a database
- Present the data in a website and a CLI Tool

FZK_ARC: 1973960965_c01-127-124.gridka.de						
Time	FarmName	ClusterName	NodeName	...	ParamName	ParamValue
9/1/20, 6:04 ...	FZK_ARC	SiteSonar	1973960965_c01-127-124.gridk...	...	Uname	Linux c01-127-124 3.10.0-1127.8.2.el7.x86_64 ...
9/1/20, 6:04 ...	FZK_ARC	SiteSonar	1973960965_c01-127-124.gridk...	...	TMP	/tmp/condor_execute/dir_20469
9/1/20, 6:04 ...	FZK_ARC	SiteSonar	1973960965_c01-127-124.gridk...	...	Singularity	SUPPORTED
9/1/20, 6:04 ...	FZK_ARC	SiteSonar	1973960965_c01-127-124.gridk...	...	Loop devices	# Set the maximum number of loop devices t...
9/1/20, 6:04 ...	FZK_ARC	SiteSonar	1973960965_c01-127-124.gridk...	...	Overlay	enable overlay = try
9/1/20, 6:04 ...	FZK_ARC	SiteSonar	1973960965_c01-127-124.gridk...	...	Underlay	enable underlay = yes
9/1/20, 6:04 ...	FZK_ARC	SiteSonar	1973960965_c01-127-124.gridk...	...	LHCB Benchmark	LHCBMarks:13.79
9/1/20, 6:04 ...	FZK_ARC	SiteSonar	1973960965_c01-127-124.gridk...	...	Max namespaces	15000
9/1/20, 6:04 ...	FZK_ARC	SiteSonar	1973960965_c01-127-124.gridk...	...	OS	Scientific Linux release 7.8 (Nitrogen)
9/1/20, 6:04 ...	FZK_ARC	SiteSonar	1973960965_c01-127-124.gridk...	...	RAM Info	MemTotal: 98734208 kB MemFree: 7043908 k...
9/1/20, 6:04 ...	FZK_ARC	SiteSonar	1973960965_c01-127-124.gridk...	...	WLCG Metapackage	Available: Yes
9/1/20, 6:04 ...	FZK_ARC	SiteSonar	1973960965_c01-127-124.gridk...	...	state	complete

Components

- Site Sonar Job Submission Tool - Automate the job submission
- Site Sonar MonAlisa Client - Automate the job results collection
- Site Sonar Web and CLI Interfaces - Allow querying and filtering collected information

Previews

The screenshot shows a web browser window with the following details:

- Browser:** Google Chrome, Fri 11:52
- Address Bar:** Not secure | 18.220.133.83
- Page Title:** Site Sonar - WLCG Configuration Monitoring Tool
- Run ID:** Change Run Id (dropdown)
- Summary Cards:**
 - Run Id:** 7
 - Started At:** Wed, 26 Aug 2020 03:18:26 GMT
 - Finished At:** Thu, 27 Aug 2020 17:53:53 GMT
 - State:** TIMED_OUT
- Filtering Section:**
 - Site ID:** All Sites (dropdown)
 - A:** Singularity (dropdown) | SUPPORTED
 - B:** Uname (dropdown) | *Linux*
 - Equation:** A|-B
 - Buttons:** ADD FILTER, REMOVE FILTER, SEARCH
- Footer:** Search Results for

Previews





Activities Google Chrome Fri 11:52

Editing Site Sonar — Wl x Editing GSoC 2020 — CE x Dashboard | Google Sun x (5) WhatsApp x Site Sonar x

Not secure | 18.220.133.83

Search Results for...

(Singularity : SUPPORTED) | ~(Uname : *Linux*)

 Total Grid Sites 67	 Sites Covered 28	 Matching Sites 20	 Percentage 71%
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[EXPORT RESULTS](#)

SITE NAME	STATE
ALICE::CERN::CERN-AURORA	Supported
ALICE::CERN::CERN-CORONA	Supported
ALICE::CERN::CERN-MIRAGE	Supported
ALICE::CERN::CERN-SIRIUS	Supported
ALICE::Clermont::LCG	Supported
ALICE::CNAF::CNAF-DUE	Supported
ALICE::CNAF::LCG	Supported

Previews

```
Activities Terminal Fri 11:54
kalana@kalana-X556UB: ~/CERN/site-sonar
File Edit View Search Terminal Help
kalana@kalana-X556UB:~$ cd CERN/site-sonar
kalana@kalana-X556UB:~/CERN/site-sonar$ ./site-sonar.py summary -r 7
2020-08-28 11:54:38,855 INFO Site Sonar application started
2020-08-28 11:54:39,962 DEBUG Starting new HTTP connection (1): 18.220.133.83:80
2020-08-28 11:54:40,736 DEBUG http://18.220.133.83:80 "GET /all_sites HTTP/1.1" 200 9646
2020-08-28 11:54:40,743 DEBUG Starting new HTTP connection (1): 18.220.133.83:80
2020-08-28 11:54:41,451 DEBUG http://18.220.133.83:80 "POST /jobs HTTP/1.1" 200 1964
2020-08-28 11:54:41,457 DEBUG Starting new HTTP connection (1): 18.220.133.83:80
2020-08-28 11:54:42,066 DEBUG http://18.220.133.83:80 "POST /run_summary HTTP/1.1" 200 4781
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+
| Id | Site Name | Pending Jobs | Completed Jobs | Killed Jobs | Job completion | Total Nodes | Covered Nodes | Covera
ge |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | ALICE::Bari::CREAM | 73 | 89 | 0 | 55 % | 81 | 28 | 35 %
| 2 | ALICE::Bratislava::LCG | 112 | 0 | 0 | 0 % | - | - | -
| 3 | ALICE::CCIN2P3::HTC | 883 | 383 | 0 | 30 % | 633 | 121 | 19 %
| 4 | ALICE::CCIN2P3::LCGSGE2 | 80 | 0 | 0 | 0 % | - | - | -
| 5 | ALICE::CCIPL::SLURM | 80 | 0 | 0 | 0 % | - | - | -
| 6 | ALICE::CERN::Altaria | 200 | 0 | 0 | 0 % | - | - | -
| 7 | ALICE::CERN::CERN-AURORA | 0 | 1600 | 0 | 100 % | 800 | 957 | 120 %
| 8 | ALICE::CERN::CERN-CORONA | 0 | 1600 | 0 | 100 % | 800 | 853 | 107 %
| 9 | ALICE::CERN::CERN-MIRAGE | 18 | 1582 | 0 | 99 % | 800 | 935 | 117 %
| 10 | ALICE::CERN::CERN-SIRIUS | 14 | 1586 | 0 | 99 % | 800 | 871 | 109 %
| 11 | ALICE::CERN::CERN-TRITON | 200 | 0 | 0 | 0 % | - | - | -
| 12 | ALICE::CERN::CERN-ZENITH | 200 | 0 | 0 | 0 % | - | - | -
```

**Thank
You**