WMArchive

Performance Service

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Follow along at:
https://cmsweb-testbed.cern.ch/wmarchive/web/performance

Update on
WMArchive

- Long-term storage for framework job reports (FWJRs)

production agents
schedule jobs

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- FWJRs stored in MongoDB buffer first and then migrated to HDFS for long-term storage

Visualization
in web UI

Aggregation
of performance metrics

Aggregation

of performance metrics

- cache of aggregated performance data
- accessible by REST server
- scheduled with varying granularity

WMArchive

Performance Service

Visualization
in web UI

WMArchive

Performance Service

https://cmsweb-testbed.cern.ch/wmarchive/web/performance

localhost:8888/wmarchive/web/performance?metrics[]=jobstate&me
CMS WMArchive Data Service
Performance
APIs
Scope
Matches 25,69m jobs
from 14. Apr. 2016 02:00 to 13. Sept. 2016 02:00.
WORKFLOW
Filter by Workflow..
TASK
Filter by Task...
HOST
Filter by Host...
SITE
Filter by Site...
JOB TYPE
Filter by Job Type..
TIMEFRAME
14.04.2016 - 13.09.2016
JOB STATE
Filter by Job State.
ACQUISITION ERA
Filter by Acquisitio
EXIT CODE
Filter by Exit Code..
EXIT STEP
Filter by Exit Step...
Metrics
Job State
CPU
Total Job Time
Total Job CPU
Min. Event Time
Max. Event Time
Avg. Event Time
Event Throughput
Total Loop CPU
Storage
Write
Read
Read Percentage ROOT
Read Rate
Read Operations
Read Cache Operations
Read Rate
Max. Read Time
ROOT Read Time
Write Time
Memory
Peak Value Rss
Peak Value Vsize
Data
Events
Axes
Workflow
Task
Host
Summary
79,83% overall success rate
24,92m jobs (100,0%)
Job State Evolution
Total Job Time Evolution
2:01:50 (7310,2s) overall average
aggregated in 16,45 seconds
Job State per Host
Top 5 Hosts
vocms0311.cern.ch 4,96m jobs (19,9%)
vocms0309.cern.ch 3,64m jobs (14,6%)
vocms0304.cern.ch 3,41m jobs (13,7%)
cmssrv217.fnal.gov 3,01m jobs (12,1%)
vocms0310.cern.ch 2,68m jobs (10,8%)
Show more...
All 17 Hosts
Show all
aggregated in 5,94 seconds
Total Job Time per Host
Top 5 Hosts
vocms0116 3:39:35 (13175,0s)
cmssrv218.fnal.gov 3:03:11 (10991,2s)
vocms074.cern.ch 2:59:42 (10782,1s)
vocms0310.cern.ch 2:23:06 (8586,5s)
vocms0303.cern.ch 2:21:21 (8480,8s)
Show more...
All 17 Hosts
Show all
aggregated in 6,56 seconds

Scope filters the data

Scope filters the data

Pick from available values

Scope filters the data

... or enter regular expressions.

Scope filters the dataset

Pick a timeframe

Select FWJR performance **metrics**

Select FWJR attributes as visualization **axes**

Summary shows time evolution and overall average

successful failed submitfailed

Interactive **visualization** for each metric and axis

Use case:
Correlate failures with sites

https://cmsweb-testbed.cern.ch/wmarchive/web/performance

Outlook

- Explore viable long-term data granularity
- Share/save individual visualizations
- Refreshing with latest data in realtime

Your **feedback** is valuable!

- Use our service: http://cmsweb-testbed.cern.ch/wmarchive/web/performance
- Open an issue: https://github.com/dmwm/WMArchive/issues/new
- Ask for help on wmarchive-dev@cern.ch