



WLCG Monitoring TF

Update for DOMA General September 2023



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WLCG Task Force

The WLCG Monitoring Task Force was set up following the outcome of the Data Challenge activity in 2021

The highest priority task is to address current issues with transfers and Site monitoring, following the needs expressed by the Data Challenge activity



WLCG common dashboards

- [Dashboard](#) used for past Data Challenges
 - Frozen version for [DC2021](#)
 - Dashboard still functional and working
- New stripped out [dashboard](#) was prepared
 - Removed all VO specific bits (mainly RSE filters)



New XRootD monitoring (XRootD servers)

Last update in [CHEP 2023](#)

Current blockers for this activity are:

- Shoveler instabilities when communicating to AMQ
 - Experienced at RAL but not at CERN, we will need to bring in more testing sites to conclude the situation
- Lack of VO reported from XRootD
 - Temporary deployment in place to be able to move forward
 - Will not allow correct assignment of VO to multi-vo servers
- Site name might not be configured by default
 - Site managers will need to set “all.sitename” aligning with CRIC information

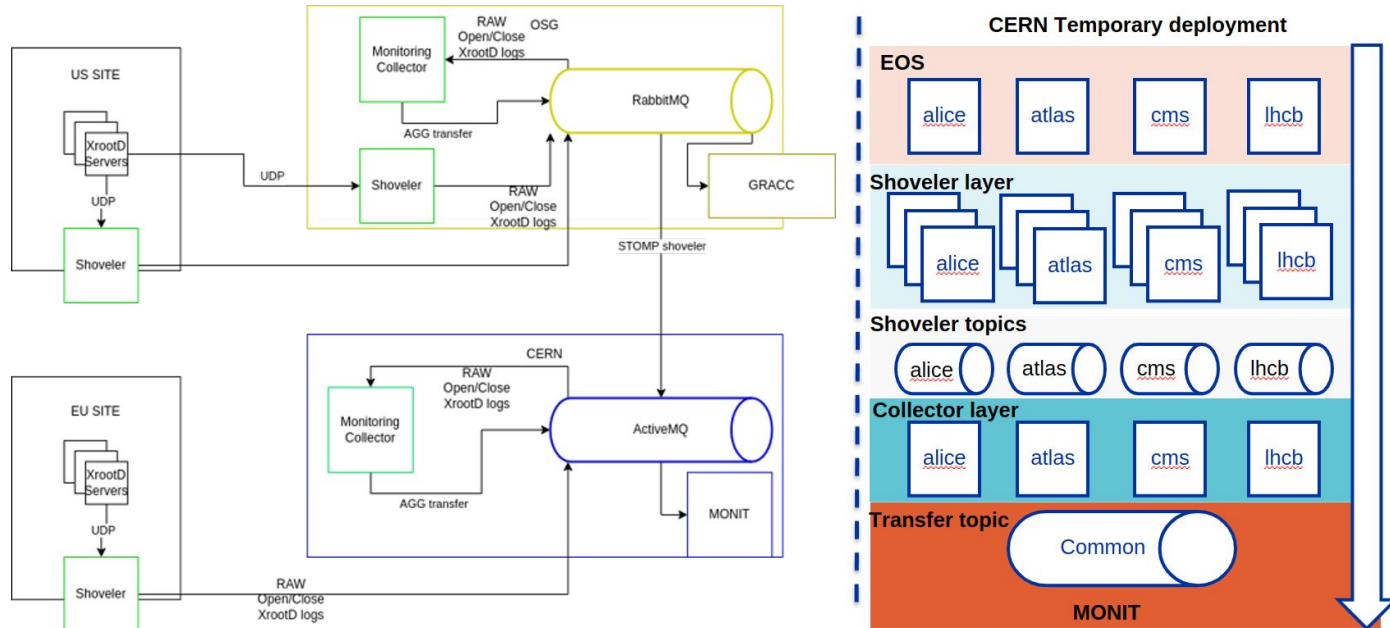


New XRootD monitoring (XRootD servers) (II)

New temporary deployment at CERN

- Focusing on being able to monitor CERN EOS servers
 - Isolated flow per VO, dedicated shovelers, topics and collectors
 - Allows to hardcode VO (needed for filtering, enrichment)
 - Not ideal solution, but enough to unlock the current deployment
- Already started configuring some EOS servers
 - Data has been validated and looks correct
 - This will include topology enrichment process and aggregation (might not be fully required for DataChallenges)
 - All EOS servers at CERN to deploy new configuration, campaign will be scheduled by EOS team

New XRootD monitoring (XRootD servers) (III)





New XRootD monitoring (dCache + XRootD)

Currently not being monitored under the WLCG umbrella

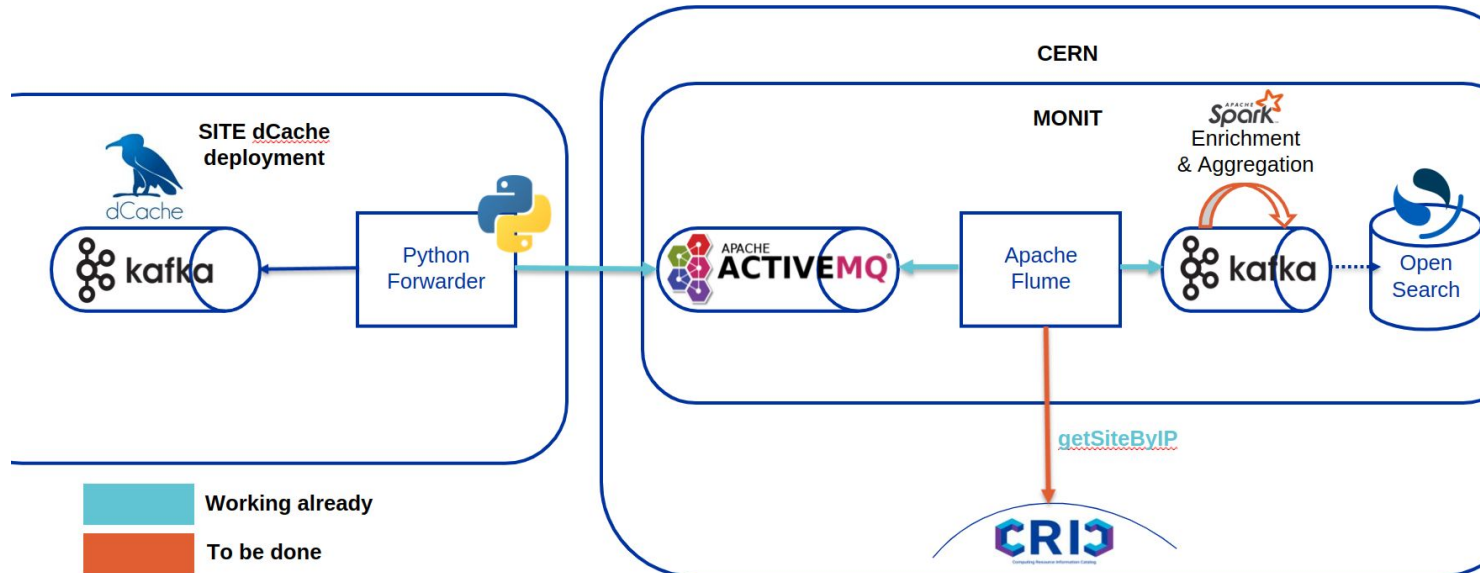
Discussed with dCache developers to integrate with dCache monitoring flow (based on Kafka)

- Prototype developed by dCache developers, based on a Python script that connects Kafka to ActiveMQ
 - Messages information to be compatible with WLCG standards
 - Will ship as part of the new “Golden” release 9.2 in the next weeks
 - FNAL to be included in an initial testing phase

Some extra work needs to be done on MONIT side

- Resolve IP to site using CRIC provided API
 - API is already available but functionality depends on site registered information about IP masks used
- Enrichment and aggregation

New XRootD monitoring (dCache + XRootD) (II)





Milestones for DC24 workshop

- New XRootD monitoring deployment for CERN EOS
- New dCache monitoring deployment for FNAL dCache
- Other selected sites integration



Overview for the Data Challenges

- Dashboard used for 2021 DC keeps working and can be reused
- Site network monitoring campaign in progress to bring in all T1s and some T2s
- New components required for XRootD monitoring are ready
 - We will need to select some specific extra sites for testing purposes to confirm issues seen in RAL
 - Main focus will be to cover CERN (XRootD) and FNAL (dCache)
 - Other sites will be added progressively
- Dependency on Scitags task from the “Research Network Technical Working group”
 - Until we get VO as part of the packet marking, we won’t be able to assign the proper one to “multi vo sites”
 - Activity label will also be needed to tell apart “Data Challenge” related transfers as it was done with FTS



Backup slides



Dashboard for new functionalities?

It is critical that the Monitoring Task Force knows about needed monitoring from the various DC24 related activities.

We do have the WLCG DOMA [CERNbox location](#) but we don't know what the monitoring requirements actually are. Need to have efforts engage with our Task Force especially where we need to compare behavior/metrics with/without a capability.

Examples:

- Packet and flow marking information
- Jumbo frame vs non-jumbo frame sites
- Storage token use