WLCG Dashboards with MONIT

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The **MONIT project** role is to provide a **common Monitoring as a Service solution** for the CERN Data Centre and the WLCG Collaboration

and replace the legacy custom monitoring solutions used by CERN/IT and WLCG in the last ~10 years
Key Concepts

**modular architecture** / built on **open source** tools

**easy data integration** / **multiple ingestion endpoints**

**decoupled** producers & consumers

**built-in **stream processing** support

**multiple backends** with different SLAs
Infrastructure usage

1k users / 1M queries per day

+40% producers / +20% data volume
Infrastructure data volume/rate

3.2 TB per day / 8.5 M docs per day
Migrate the old WLCG dashboards to MONIT

preserve old functionality / import all historical data

build an internal community / contribute upstream
Successfully migrated all job and data dashboards (presented in the next slides)

Site dashboards migration to be completed in Q1 2020
WLCG Site Transfers since Sep 2017

Data from FTS/XRootD (via AMQ) Enriched with VOFeed topology

Overall transfers dashboard Dedicated views for FTS/XRootD Efficiency computation
### ATLAS DDM Transfers

**since May 2019**

Data from Rucio (via AMQ)

Enriched with AGIS topology

Matrix with overall status

Drill down to transfer details

Error messages classification

#### Efficiency

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ATLAS
DDM Accounting
since May 2019

Data from Rucio/HDFS (via AMQ)
Enriched with AGIS topology
Enriched with storage accounting

Improved workflow: push vs pull
Global view and site view
ATLAS
Job Accounting
since Jul 2019

Data from Panda (via JDBC)
Enriched with AGIS topology
New finalised and closed states
Classification of BOINC sites
Job slots, wall clock, HS06
Production

CMS Job Monitoring

Since Jul 2019

Data from Condor (via AMQ)
Pre-enriched with topology

New workflow: push vs pull
Dedicated views for jobs/tasks
Several new user tags
Introduction | Infrastructure | Dashboards | Summary
Stable production infrastructure
integrated many different monitoring use cases
can scale to its continuous growth

Migrated most WLCG/Experiments dashboards
stopped old services and retired the old infrastructure
many thanks to all the people involved!