20th International Conference on Computing in High Energy and Nuclear Physics (CHEP2013)

Contribution ID: **106** Type: **Oral presentation to parallel session**

Processing of the WLCG monitoring data using NoSQL.

Thursday 17 October 2013 13:52 (22 minutes)

The Worldwide LCG Computing Grid (WLCG) today includes more than 170 computing centres where more than 2 million jobs are being executed daily and petabytes of data are transferred between sites. Monitoring the computing activities of the LHC experiments, over such a huge heterogeneous infrastructure, is extremely demanding in terms of computation , performance and reliability. Furthermore, the generated monitoring flow is constantly increasing , which represents another challenge for the monitoring systems. While existing solutions are traditionally based on ORACLE for data storage and processing, recent developments evaluate NoSQL for processing large-scale monitoring datasets. NoSQL is an increasingly popular framework for processing datasets at the terabyte and petabyte scale using commodity hardware. In this contribution, we describe the integration of NoSQL data processing in the Experiment Dashboard framework and the first experience of using this technology for monitoring the LHC computing activities.

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Session Classification: Distributed Processing and Data Handling A: Infrastructure, Sites, and Virtualization

Track Classification: Distributed Processing and Data Handling A: Infrastructure, Sites, and Virtualization