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Dolosse - A Modern, Scalable, and Extensible Data Acquisition and Management System for Nuclear Physics Experiments

Friday 26 April 2024 09:40 (20 minutes)

Dolosse, a project funded by the National Research Foundation, is an innovative open-source Data Acquisition System (DAQ) specifically designed to meet the sophisticated requirements of contemporary nuclear physics research. This framework facilitates a high-throughput, fault-tolerant streaming service capable of handling the 'Big Data' attributes—volume, velocity, and variety—that characterize modern experimental physics data streams. By integrating with state-of-the-art Big Data technologies, Dolosse offers a comprehensive solution for real-time data analysis, visualization, and system monitoring. The system's architecture promises enhanced data integrity, reduced latency, and increased throughput, thereby enabling more complex and data-intensive experiments. Dolosse is projected as a pivotal tool for future research advancements in the global nuclear physics community.

Minioral

Yes

IEEE Member

No

Are you a student?

No

Authors: Mr MACHETHE, Katlego; MOKOENA, Thabang

Co-authors: Mr SOOK, Avesh; Mr CALLAGHAN, Casey; Mr KHAKE, Olebogeng; Mr CARELSE, Shane

Presenter: MOKOENA, Thabang

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