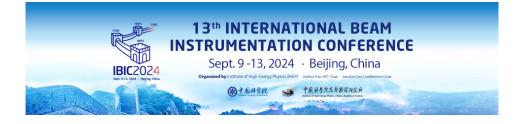
IBIC2024 - 13th International Beam Instrumentation Conference



Contribution ID: 181 Contribution code: WEP60

Type: Poster Presentation

Integrating InfluxDB and Grafana in a Dockerized CA EPICS Monitoring System

Wednesday 11 September 2024 14:20 (1h 30m)

A data monitoring system based on CA and EPICS designed for particle accelerators is proposed, which leverages Docker containers for deployment and integrates InfluxDB for data storage and Grafana for data visualization. The Data Collection Engine built with Python gathers data through EPICS Channel Access, caches it temporarily, and stores it permanently in InfluxDB. A two-level cache design is used to optimize data access. The monitoring system also offers a web application for configuration management and a web application for online data access and visualization in real-time, which provides a powerful and user-friendly solution for data collection, storage, visualization, and management in particle accelerator experiments.

Footnotes

Funding Agency

I have read and accept the Privacy Policy Statement

Yes

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Session Classification: WEP: Wednesday Poster Session

Track Classification: MC7: Data Acquisition and Processing Platforms