

AI-assisted retrieval and visualization of control-system data from the InfluxDB time-series database at the European XFEL

Friday 14 November 2025 12:05 (10 minutes)

Historic data of settings and operational conditions within the Karabo SCADA system at the European XFEL is stored in an InfluxDB time-series database and facilitates trend analysis, anomaly detection and performance optimization. Frequently, the data serves as a foundation for data-driven decision-making, allowing researchers and engineers to analyze past events, validate system behavior, and refine experimental processes for improved efficiency and reliability. In this contribution, a prototype of a chat-based AI assistant for retrieval and visualization of data from the database is presented, which provides an easier and quicker access to the data than the traditional Grafana-based frontend.

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Session Classification: Session 1