

# Development of Contemporary Log Management Solution for the Information Infrastructure of the BM@N Experiment

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In the course of developing a software ecosystem of the BM@N experiment, a multitude of web services are created, including data processing systems and information resources. A significant challenge is the monitoring of system operational states as an integral component of the maintenance procedure. The report considers implementing a contemporary solution for log management of the BM@N software systems. The utilization of an API Gateway as a singular access point for all web services is highlighted, as it streamlines collections of data regarding incoming requests. Additionally, a system for the collection and storage of logs has been implemented based on the high-performance and cost-effective technology stack of ClickHouse and Datadog Vector. The employment of the Metabase business intelligence platform further facilitates the analysis of the collected logs. Ultimately, the integration of these solutions enhances the resilience of the system and facilitates security auditing. This contributes to improved state tracking of the systems within the information infrastructure of the BM@N experiment.

**Primary author:** ROMANOV, Ilya

**Co-authors:** Mr CHEBOTOV, Alexander (JINR); GERTSENBERGER, Konstantin (JINR)

**Presenter:** ROMANOV, Ilya

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