

ABSTRACT

Server performance management in the Industrial Engineering Faculty laboratory at Telkom University is crucial to ensure optimal operations. Ineffective server monitoring can lead to downtime and operational losses. This study develops a dashboard-based server monitoring system to track real-time performance, including CPU usage, RAM, and traffic, while providing proactive notifications. The methodology uses Plan-do-check-act (PDCA). Data collection involved interviews, direct observation, and literature studies. Evaluation of four monitoring tools Node Exporter Full Dashboard (Grafana), Uptime Kuma, Nagios, and Site24x7 identified Site24x7 as the best solution due to its proactive notifications, real-time monitoring, and historical data analysis capabilities. However, improvements are needed in storage monitoring and dashboard interface. Integrating various monitoring tools into a single platform enhances administrator efficiency. This system aims to reduce downtime, improve operational efficiency, and support better server resource management. Additionally, this study expected contributes to the development of information systems in higher education institutions and can be adapted for similar needs in other organizations.

Keywords — Information System, Server Monitoring, Dashboard, Proactive Notifications