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Polka - web management tool for TANGO controls

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Modern control systems increasingly require intuitive and platform-independent tools to manage distributed infrastructures. We present Polka, a lightweight web-based management tool for TANGO Controls. Polka offers a user-friendly interface to administer multiple TANGO databases, device servers (Starters), branches, and pooling configurations including pooling Manager, Pooling Profiler, and Pool Threads Manager.

Built with React and WebSocket-based communication, it delivers a responsive, real-time interface accessible from any browser. Unlike Astor, the long-established desktop-based TANGO Manager, Polka requires no client-side installation and supports platform-independent access for both administrators and operators.

While Astor remains effective for quick diagnostics and device server control via its Java GUI, Polka offers a modernized approach to the same core functionalities, reintroducing multi-database support, Starter editing, and branch migration. It also brings refreshing tools for pooling configuration profiling with visualizations and delivers updated statistics dashboards.

This paper will present Polka's architecture, key features, and operational benefits in scientific infrastructures. The comparison with Astor highlights how Polka preserves core TANGO management capabilities while introducing scalable, web-based enhancements that address the needs of modern distributed control systems.

Footnotes

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