

World's First NoSQL Process Historian

Product release: inmation presents the next generation of industrial system integration middleware based on the leading NoSQL database - MongoDB



(Cologne, 21.04.2015) The inmation Software GmbH, based near Cologne, Germany, today announces the release of its new software product system: inmation. system:inmation is a centrally configurable and horizontally scalable data middleware system with historian and infrastructure features. It is specifically designed to meet today's increasing requirements of production system real-time data connectivity and system integration simplification. These requirements are catalysed by the prospering Industrie 4.0 and Smart Factory trends. Offering scalability options for all service layers, the product eases the

complete and cost-effective enterprise-wide integration between production process, technical analysis, MES, BI and ERP layer.

This is also supported by a flat licensing model, and technically achieved by the usage of distributed CPU capacities on commodity hardware. Its core technology integrates classic OPC and OPC Unified Architecture, embedded Lua scripting and NoSQL storage. system:inmation uses the leading NoSQL database MongoDB as foundation for all data storage processes, regardless of the individu-

al data types, e.g. raw data time series, aggregates, alarms and events, or object metadata. The statistical data aggregation is implemented entirely according to the global OPC UA standard. All data is imminent available to third-party applications consuming JSON documents, alternatively exposed through OPC and a .NET library.

Besides its schema flexibility, the second big advantage of MongoDB databases is the straightforward scalability. It is beneficial for enhanced accessibility through so-called Replica Sets and distributed database installations in the form of Shards. Such a cluster can be installed within minutes. system:inmation supports the recent MongoDB 3.0 release and the Wired Tiger storage engine.

“Our new product consequently addresses the industry’s demands like adaptability, scalability, openness, standards support in conjunction with a reasonable TCO. Today no manufacturer can do without a homogenous process or production data layer as a foundation for enterprise business processes and intelligence. Yet many of the established products are constructed in a monolithic manner and can’t meet the requirements of Industrie 4.0 such as flexibility and scalability.” says Timo Klingenmeier, co-founder and managing director of inmation Software GmbH. “After more than two successful decades as system integrators, we created a new product to fulfil our vision of a data infrastructure, that allows for simple management and effective scaling. This applies to any format or quantity of tagged and time-based data up to the Enterprise Scale. OPC UA and NoSQL are only two of the essential technology drivers. Individually configurable access security on object level is a key factor, because our infrastructure can manage bi-directional data flows between ERP/MES platforms and the process level. Unfortunately existing OPC infrastructures don’t always hold a high level of security.

By using system:inmation’s Drag & Drop Security this problem can be solved for legacy systems in a very smart manner. Besides the process historian features, system:inmation addresses high-scale infrastructure and integration needs as well.”

The entire configuration and monitoring of the system takes place centrally, independent of the number of deployed servers.

inmation releases the new product on the occasion of the OPC Europe Day on the 21st May 2015 in Paris. A trial version for public download is scheduled for the second half of 2015. system:inmation is currently available for all latest 64-bit versions of Microsoft Windows, whereas the database instances can additionally be installed on all common Linux distributions. The product is industry-agnostic and can be implemented in process and discrete manufacturing.

About the author

Timo Klingenmeier

Co-founder, GM and Technical Lead inmation

Timo has a history of 25 years in industrial data processing.

He started off in 1989 as a Software Developer writing first data historians for MS/DOS with such ancient tools like Turbo Pascal and dBase. From 1993 to 2003 he acted as general manager for the industrial system integration companies iDV and best solutions. After the acquisition by Matrikon, Timo functioned as specialist for industrial software and head of German operations until 2010. In 2011 and 2012 he was consultant for international offshore wind projects. Since 2013 he focuses on the development of the NextGen information management software that is system:inmation.

