



## THE LEGO® SMART FACTORY MANAGED AND FULLY SUPPORTED BY ARIS

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Out and About

## **Summary**

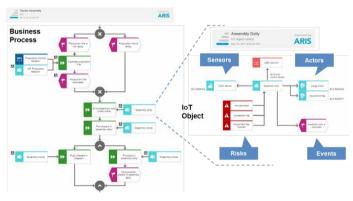
The Lego® Smart Factory showcase – a cooperation between Software AG and the German Research Center for Artificial Intelligence (DFKI) – covers a complete end-to-end scenario of a tractor manufacturer and shows how a successful strategy to execution in a digital business can work. The whole value chain consisting of business processes, risks and IoT networks is planned with ARIS 10 and executed with either webMethods or the research prototype RefMod-Miner of the DFKI. Workers are assisted by ARIS Mobile and the progress is monitored with PPM. The loop is closed by visualizing the measured KPIs with ARIS Aware in ARIS Connect. See how complex nexuses can be managed successfully with a clear methodical approach!

## The Showcase in Detail

See what a successful strategy to execution in a digital business looks like! Our demo presented at CeBIT 2017 covers a complete end-to-end scenario of a tractor manufacturer, from customer acquisition and individual order, to tractor production, and to final distribution and billing. The entire Business Process Management Lifecycle, including the phases "Strategy & Design," "Implement & Execute" and "Monitor & Control," is fully supported by ARIS and the Digital Business Platform (DBP) of Software AG.



The digital transformation requires a well-planned strategy – a strategy that is designed with ARIS. It is essential to know what the organization, data, and business processes look like in order to derive the most value. The complete E2E scenario, including all relevant business processes such as sales order processing, production planning and assembly, as well as the billing and delivery, are modeled in ARIS. Our new method for Internet of Things (IoT) modeling in ARIS 10 allows you to cover the necessary technical resources and connect them to the business processes they are used in! Don't forget to think about risk and compliance – include these aspects into your business landscape in ARIS and operationally address them with ARIS Risk & Compliance Manager (ARCM).

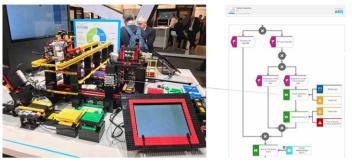


Internet of things (IoT) modeling in ARIS

The Business Blueprint is then transferred to webMethods – the implementation and execution environment of Software AG's DBP. The process models serve as a basis for the implementation; the necessary services are being realized and connected to the IoT objects. In our showcase, we completely control the Lego® Smart Factory, which is a result of a cooperation project between Software AG and the DFKI. The production line built of Lego® bricks assembles tractors out of other bricks based on the underlying process models from ARIS. The process includes a manual production step, where an employee has to assemble an exhaust.

BPM Lifecycle: A clear methodical approach covered by ARIS and the DPB

ARIS Mobile assists the assembler at this step – he simply scans a code with his mobile device at the working station and gets a video instruction on what to do. All necessary information comes directly from the ARIS repository.



Interactive overview dashboard with the actual measured KPIs from PPM in ARIS Connect

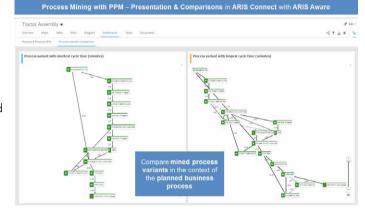
Tractor Assembly ◆

Tractor Assembly ★

Performance Dashboard in ARIS Aware

Human task supported by ARIS Mobile

The entire assembly process is monitored by ARIS Process Performance Manager (PPM) based on event logs produced by the execution engine. Amongst others, the real behavior of the process is mined and presented as a business process model (Process Mining, Process Discovery) - and separate variants with specific characteristics are automatically derived as well. Additional details on single instances, error rates, throughput times, material costs and revenue are analyzed. The loop is closed by providing all relevant KPIs as well as the derived function flows in ARIS Connect with ARIS Aware in the context of the originally planned process. This allows a business user to analyze differences between as-is and to-be, to analyze the fulfillment of business goals and to identify potential optimizations of the business processes. The measured business processes can be transferred to the ARIS repository, they can be adapted and simulated with different parameter settings in order to identify bottlenecks and generate best practices!



Process Mining and variant comparison in ARIS Connect

You can see the complete showcase at Hanover Messe Industry, on April 24-28 in Hanover, Hall 7, booth A34!

You can also watch this video on You Tube to learn more.



Performance KPIs side-by-side with ARIS model

## **ABOUT SOFTWARE AG**

The digital transformation is changing enterprise IT landscapes from inflexible application silos to modern software platform-driven IT architectures which deliver the openness, speed and agility needed to enable the digital real-time enterprise. Software AG offers the first end-to-end Digital Business Platform, based on open standards, with integration, process management, in-memory data, adaptive application development, real-time analytics and enterprise architecture management as core building blocks. The modular platform allows users to develop the next generation of application systems to build their digital future, today. With over 45 years of customer-centric innovation, Software AG is ranked as a leader in many innovative and digital technology categories. Learn more at www.SoftwareAG.com.

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