



Expertise – Passion – Automation

software AG
Freedom as a Service

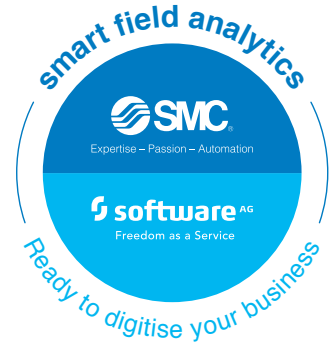


smart field analytics

Intelligent optimisation.
For increased efficiency.

Optimise processes. Increase energy efficiency. smart field analytics makes it possible

Digital transformation requires increasingly flexible, productive and efficient processes. The most important prerequisite is data. This needs to be collected from various sources, linked, analysed and, if necessary, shared. That's an enormous challenge. With **smart field analytics**, SMC and Software AG are paving the way.



Increase your company's competitiveness

smart field analytics combines all the technologies and systems you need to immediately implement your smart processes. The solution is based on the close collaboration between SMC, a global provider of pioneering automation technology, and Software AG, a global leader in business infrastructure software.

No matter what stage you are at in the digitisation process, **smart field analytics** enables you to benefit from our concentrated expertise, which offers you the ideal perspectives for maximum system availability, stable processes and new efficiency potential.



Rapid deployment

via intelligent drive systems and preconfigured IoT platform modules



Scalable IT environment

tailored to your individual requirements



Secure data processing

thanks to highly available IT infrastructure



Real-time data analysis & visualisation

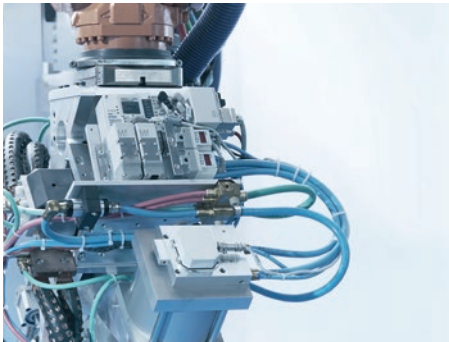
makes it easy to quickly detect when limit values are exceeded

Intelligent maintenance

Predictive servicing

Unscheduled production shutdowns cost time and money. **smart field analytics** prevents this from happening in the first place. Limit values that may indicate an imminent failure are immediately recorded, evaluated and transferred to a maintenance ticket.

Naturally, the analysis can also be based on machine learning. In this case, an algorithm calculates the anomaly value and automatically triggers a maintenance order. This allows maintenance to be carried out at the best possible time, which makes plant operation much smarter and more economical.



Savings potential made transparent

Increasing energy efficiency

In the face of sharply rising energy costs, savings potential needs to be exploited more and more effectively. With our solution, you can continuously determine the energy consumption of individual machines and systems and optimise them accordingly.

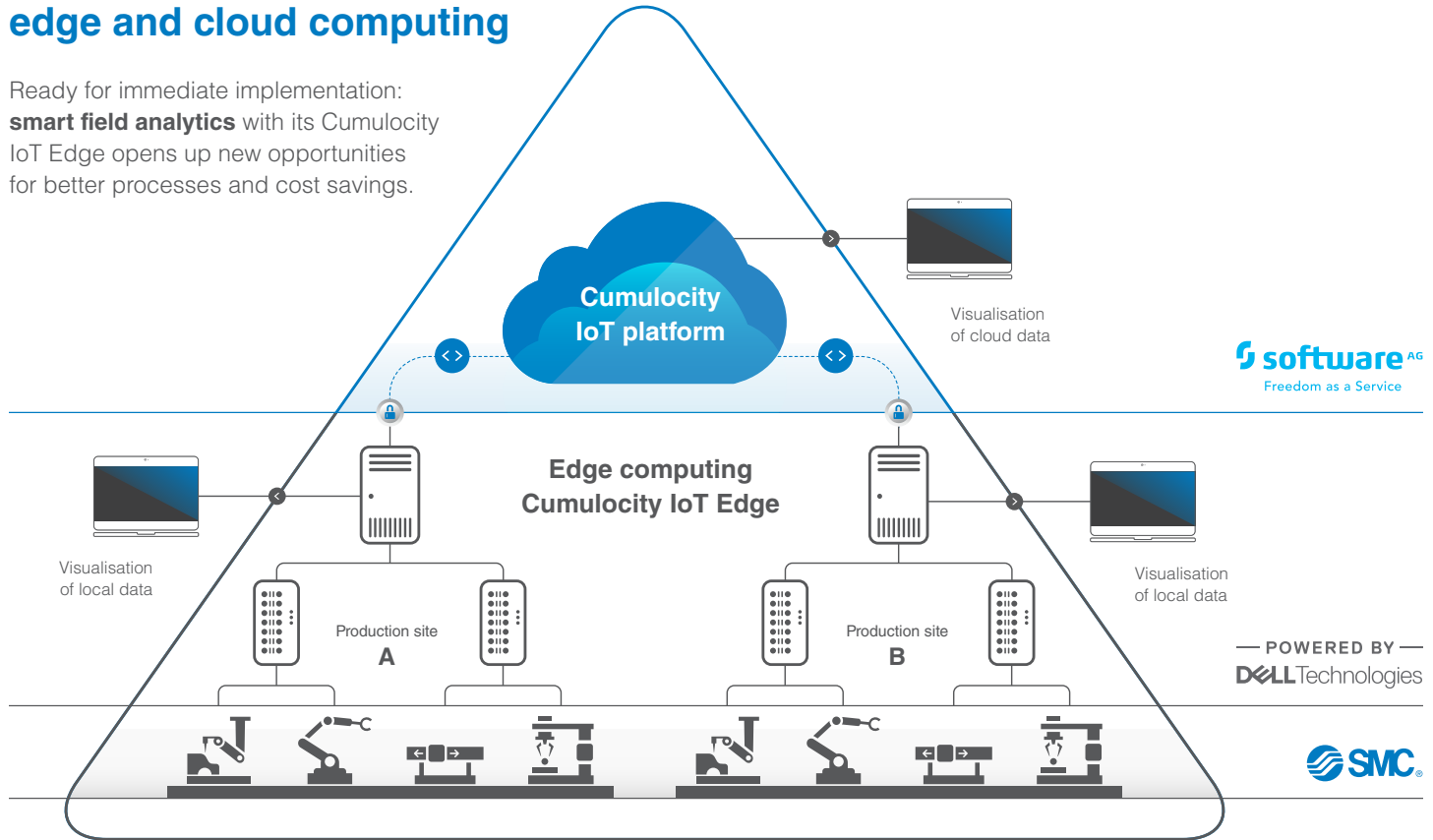
The decisive data is provided by pressure value and flow sensors at the maintenance unit, which is the entry point on every machine. Continuous monitoring of the values detects leaks in the machine, consumption peaks during start-up or pressure fluctuations in the network. From this information, targeted measures can be derived for energy savings in the machine environment and on the shop floor.

Energy consumption optimisation at Industry 4.0 level

With the intelligent use of compressed air through Air Servo technology, energy costs can be reduced by up to 50 %.

The best of two worlds: smart field analytics with edge and cloud computing

Ready for immediate implementation:
smart field analytics with its Cumulocity
IoT Edge opens up new opportunities
for better processes and cost savings.



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— POWERED BY —
DELL Technologies

SMC

Sensors collect the data directly in the machine and transport the values at millisecond intervals via the common industry standards IO-Link and OPC UA to a Dell edge gateway. This has the same user interface, interfaces and analysis functions as the Cumulocity IoT cloud platform and analyses the delivered data in real time.

If a deviation from the taught-in target curves is detected, the data is forwarded to the cloud for further evaluation and diagnosis. In addition, proven analysis models can be implemented centrally in other production lines and locations.



Thick edge IoT gateway

Server for processing power-intensive tasks such as real-time analysis of large volumes of time-critical data.



Thin edge IoT gateway

Small processors that provide acute computing power in the immediate vicinity of the machine park. Used for pre-selection according to criteria and for simple real-time analyses.

Team power for your Industry 4.0 initiatives

To help us drive the future of mechanical and plant engineering, we rely on strong strategic partnerships with integration partners, software vendors and service providers. Our goal is to shape this digital transformation together – with solutions that can be rapidly implemented and configured to enable smart, efficient and competitive production processes.

IoT cooperation for greater transparency and efficient operating and maintenance processes

By combining their expertise, SMC, Software AG and Dell are helping companies seamlessly integrate and synchronise automation and IT systems into their production environments.



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Discover intelligent solutions for a rapid, safe and effective start to your Industry 4.0 project. We will be happy to advise you on the possibilities and look forward to hearing from you.



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