COPA-DATA at Smart Production Solutions, Hall 7, Booth 590

The integration of interdisciplinary data

*Bringing together interdisciplinary data offers companies great opportunities to find new and efficient solutions that provide answers to developing customer demands. From November 8-10, COPA-DATA will present various cross-disciplinary application examples of the zenon software platform from production, infrastructure, and laboratory automation at the SPS Trade Fair in Nuremberg in Hall 7, Booth 590.*

Increasingly, companies are recognizing the potential that digitalization opens up for them. In order to take full advantage of the opportunities, they face the challenge of using data from more than the localized environment, such as the monitoring and control of production facilities. To make informed decisions, data must be brought together from different sources.

Industry 4.0 is more than automation

"When we talk about Industry 4.0, it is by no means limited to automating individual production plants. Only when we bring together information from different areas and think in interdisciplinary terms does the full potential of the IoT open up to us," says Frank Hägele, Sales Director COPA-DATA Germany. Being cross-industry and cross-manufacturer, the MTP standard supports companies to orchestrate their data from different disciplines without further programming effort. In zenon 11 from COPA-DATA, MTP is natively integrated at the process orchestration level using zenon POL. This enables companies to implement modular "Plug & Produce" solutions.

Modularization using zenon Process Orchestration Layer

At SPS, COPA-DATA will present the application possibilities of zenon POL to control and orchestrate individual modules in the process industry. The modularization of production is a decisive step in the flexible design of plants. With modular production, complex processes can be divided into many small sections and standardized. Logically interconnected, the individual modules can be combined again and again in new and interdisciplinary ways for a true plug & produce approach. This means that nothing stands in the way of rapid adaptation to customer requirements or the production of small batches.

Shortened time-to-market thanks to DCS+

Complementing the portfolio of solutions presented at the COPA-DATA booth at SPS, the Decentralized Control System zenon DCS+ will also feature. The system is used to manage process plants both in batch and in Conti mode. The "+" in the name stands for the added value of the zenon solution compared to classic DCS offerings. Process-related components can be organized into very small, decentralized units with zenon DCS+. This makes it ideal for use with the MTP standard. Additionally, manufacturer independence in terms of hardware components and operating systems results in a reduction of investment cost and in an associated shortened time-to-market.

Using digitalization to your advantage with zenon

Another application example presented by COPA-DATA at this year's SPS will be the IIoT services of the zenon software platform. Plants can be networked across locations, processes harmonized, and third-party systems and IoT devices, such as smart energy meters or wearables, integrated with existing systems. With zenon, the simple and secure integration of third-party components succeeds. Accumulating data can be stored centrally, including in the cloud, in real time. HMI, BDE and SCADA solutions for control functions guarantee simple operability. At the same time, users benefit from increased security. To protect against cyber-attacks, zenon communicates exclusively via certificate-encrypted TLS connections. The trouble-free operation of plants can be guaranteed thanks to integrated data for predictive maintenance.

A "single source of truth" brings sustainable clarity

Collecting interdisciplinary information can provide insights into production processes. It also creates a lever for sustainability initiatives – even while complexity increases. As data from different disciplines flows into a networked "single source of truth", valuable conclusions can be drawn. When production plants digitally record which parts were produced against energy consumption, the results can be broken down to each part and, thus also, to the unit price. This valuable information can be used to improve the sustainability of production processes, with the use of resources successively optimized throughout the system.

"In addition to the possibilities for digitalization and the IIoT with zenon, we will present interdisciplinary approaches from the Infrastructure and Laboratory Automation sectors. Trade fair visitors can also look forward to the presentation of our zenon DCS+ process control system. We are certain that the future of digitalization is interdisciplinary. With our software-driven, digital approach, we can provide answers today to the challenges of tomorrow," says Frank Hägele, Sales Director COPA-DATA Germany.

Captions:

The zenon software platform makes data from distributed systems available centrally.

"MTP\_HMI\_overview: with zenon POL, the individual modules of a plant can be controlled efficiently and from different end devices.