SIEMENS

Press

SPS 2024, Hall 11

TIA Portal Version 20: Enabling peak performance and efficiency

- **Support for the latest PLCs ensures compatibility and increases performance**
- **User-friendly handling thanks to human-readable text-based representation of graphical code and security update**
- **Performance, collaboration and efficiency improvements driven by generative AI and integrated cloud capabilities**

Siemens, a leading technology company, is introducing the latest version of the Totally Integrated Automation (TIA) Portal at the Smart Production Solutions (SPS) trade show in Nuremberg, Germany. The engineering framework is designed for improving industrial automation processes. By simplifying workflows and increasing efficiency, it enables faster project development.

TIA Portal Version 20 focuses on performance and efficiency enhancements for users, who will benefit from improved time-to-market, increased competitiveness, and agile adaptation to rapidly changing markets. The new version integrates new programmable logic controllers (PLCs) and simplifies handling for engineers.

Rainer Brehm, CEO Factory Automation at Siemens, explains: "Fully integrated automation as offered in the TIA portfolio is the foundation for expanding toward software-defined automation. With TIA Portal Version 20, users can boost the performance across the board and leverage the most modern functionalities of PLCs – including AI, integrated testing and enhanced security."

Latest PLC integration enhances performance and security

Siemens is addressing the challenges of increasing the performance of industrial production across the entire Siemens Simatic controller portfolio. TIA Portal Version 20 offers extended functions like support for new PLCs with extensive motion control and safety functions, including the latest S7-1200 G2 controller, increased PLC performance with S7-1511/S7-1513, the introduction of the new modular S7-1500 CPUs, a new technology CPU in the highest performance class, and a new software controller CPU. They all provide a human-readable text-based representation of graphical code with TIA Portal Version 20. This ensures the easy use of external tools like GIT or Beyond Compare as well as code generation to make programming more convenient for users.

Security features are also being continuously improved. With TIA Portal Version 20, Simatic PLCs can be connected to the central user management system for the shopfloor. User management access control (UMAC) allows service technicians to easily access their shopfloor devices while using their standard enterprise credentials – without compromising security. UMAC is in turn connected to the standard identity provider service in the customer's infrastructure: for example, Microsoft Active Directory or Azure ID. This enables administrators to efficiently manage permissions for automation devices in a standard way, exactly like it's done for software applications in an IT infrastructure.

Performance enhancement across the board

In addition to the new PLC compatibility, improved program optimization options and a faster program runtime analysis for service and maintenance have been implemented, resulting in an additional performance boost. The new version also offers opportunities for greater efficiency when it comes to engineering across different locations: An optimized data exchange between TIA Portal, TIA Portal Cloud and Project Server Cloud ensures seamless collaboration between all platforms. This includes a user-friendly edge app as well as automated cloud backup that ensures the availability of all the latest changes.

Another step toward improved performance is the testing function in the TIA Portal Test Suite where continuous regression tests guarantee reliable code quality for all

machines. TIA Portal Version 20 supports test-driven development of the latest S7 programs and sequential testing.

The Siemens Industrial Copilot seamlessly connects generative AI with the TIA Portal to support automation engineers in their daily work. The new version ensures that important function and security updates are incorporated.

TIA Portal Version 20: Enabling peak performance for all users

This press release and press picture are available at
https://sie.ag/6qmXPJ

Further information on Siemens at SPS 2024 at

siemens.com/press/sps24 and siemens.com/sps-fair

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