

OKTOBERFEST TAP INTO TECHNOLOGY

EVENT DETAILS & COURSE DESCRIPTIONS

SEPTEMBER 28, 2023 WEST BEND, WI



Event Overview

OKTOBERFEST DAY AT A GLANCE:

- Doors open at 8am
- Breakfast served 8am 10:30am
- Seminars begin at 8:30am
- Lunch served 11:30am 1:30pm
- Keynote speaker at 1:00pm
- 40+ exhibitors automation fair open all day
- Oktoberfest reception begins at 4pm





Thursday September 28th



8:00 AM – 7:00 PM Come for part of the event, stay for the whole thing or just come for the fun! 9

Washington County Fair Park & Conference Center 3000 Hwy PV, West Bend, WI 53095

Oktoberfest Reception

NETWORKING AND PRIZES

4 PM - 7 PM

After a day full of learning, the post event reception is a great time to catch up with your peers, PCC and our vendors for a little fun including food, beverages, games, and raffle drawings. Attendees will turn in their technology passports / surveys to receive their official Oktoberfest stein to use when the beer is tapped. Winners will be chosen for these raffle prizes:











BAGS TOURNAMENT FOLLOWING RAFFLE DRAWINGS AT 5 PM

Part of the PCC Oktoberfest festivities is the traditional Bags/Cornhole tournament. Two person teams will compete in a double elimination format until a champion is crowned. If you would like to participate but do not have a partner we will team you up with another person. **Sign up for the bags tournament at the front reception desk.**



Course Offerings & Schedule

Keynote Speaker

OT Network Security – Accelerate your Journey!

Presented by: Siemens Industry, Inc.

TIME: 1:00 PM - 1:50 PM ROOM: BERLIN

Demystify the process of taking a network from insecure or "lightly" secured to the current state of the art in OT Cybersecurity. We will layout the natural implementation progression of cyber-protections for an Operational Technology (OT) networks as prescribed by the IEC and NIST standards. We will show why a dedicated OT Cybersecurity Program is essential to obtain and maintain security in an OT environment. Find out how to get started and then accelerate your OT cyber journey.



Chuck Tommey P.E., GICSP, ISA Cyber Expert

Seminars

Unpacking PackML: More than just packaging machines | S1

Presented by: DMC

TIME: 10:30 AM - 11:20 AM ROOM: MUNICH

DMC has applied the OMAC PACKML programming standard to a variety of discrete manufacturing applications using Siemens technologies and tools. A PACKML implementation has a wide range of benefits throughout the equipment lifecycle, starting with faster software development and shorter debug times for the OEM and leading to operational consistency and reduced maintenance costs for the end user. PACKML includes a state model for standardized, robust programming that is easy to troubleshoot as well as PackTags that provide standard communication interfaces both to other machines as well as higher level systems. This presentation will provide an overview of the PACKML standard and its benefits to both OEMs and end users, a review of tools provided by Siemens for its implementation and case studies of DMC projects showcasing successful PACKML implementations.

Troubleshooting Critical Industrial Ethernet Networks | S2

Presented by: Softing

TIME: 9:00 AM - 9:50 AM ROOM: COLOGNE

Industrial Ethernet networks are critical in manufacturing processes to keep production running. Challenges come in many directions including EMI from machines and power cables, distortion from moving cables, intermittent outages due to harsh environment, damaged cables, or aging cables. Add to this the varied media types to manage and troubleshoot such as copper cable, fiber optics, PoE, and wireless access points.

Learn about a powerful Ethernet testing tool called BERT that can help you troubleshoot Ethernet links, even intermittent issues, across different media types, and find issues related to EMI. Learn how to troubleshoot PoE, check signal strength of access points, and find issues with active network devices like duplicate IP addresses.

Introduction to using JavaScript in WinCC Unified HMI | S3

Presented by: PCC

TIME: 9:30 AM - 10:20 AM ROOM: FRANKFURT

Learn the basics of programming in JavaScript, debugging techniques and utilizing Predefined Code Snippets in the WinCC

Unified System in TIA Portal.

Programming with Structured Control Language (SCL) in TIA Portal with S7-1200/1500 | **S4** *Presented by: PCC*

TIME: 8:30 AM - 9:20 AM ROOM: FRANKFURT

Learn about programming with SCL and how you can mix with typical ladder logic. The SCL language is very powerful and well suited for complex math operations, data handling with arrays and string processing. SCL is a high-level text based language that is easy to understand, yet provides many benefits over traditional Ladder programming. This seminar will provide the foundation for you to start programming in SCL.

Security Concepts in TIA Portal for protecting automation system during development and production | **S5**

Presented by: PCC

TIME: 10:30 AM - 11:20 AM ROOM: FRANKFURT

As security is becoming a bigger part of the automation system see what Siemens brings to the table. Learn how to configure user access for editing TIA Portal projects in development and utilize the new Security Wizard to protect the access to the Automation System during production. See the various methods that are available to protect your intellectual property in TIA Portal.

TIA Portal – Tour of nice to know or off the beaten path features | **S6** *Presented by: PCC*

TIME: 2:30 PM - 3:20 PM ROOM: FRANKFURT

In this tour of TIA Portal you will be exposed to many useful features that just might be under the radar. TIA Portal offers many features to improve usability and productivity. Several topics will be touched on such as Online DB handling, Managing workspaces and settings, Block parameter handling, Multi-instance, PLC backup images, upgrading projects, CPU firmware and general overall usability features.

Utilizing Built-in Diagnostics features and extended diagnostic instructions in TIA Portal | **S7**

Presented by: PCC

TIME: 3:30 PM - 4:20 PM ROOM: FRANKFURT

Experience the incredible amount of diagnostic information that is available without any programming. Learn about viewing diagnostic information in TIA Portal, S7-1500 PLC display, PLC Web Server, and HMI System diagnostics viewer. Take your diagnostics to the next level with included diagnostic functions.

Getting the Most from Your S120 Drives | S8

Presented by: Siemens

TIME: 2:30 PM - 4:20 PM ROOM: MUNICH

The SINAMICS S120 Multi-Axis Drive System has been installed more than five million times globally across a wide range of applications. Yet not everyone is getting the most from this highly capable system. This workshop will provide key insights and "how-to" advice to help you get more from your investment, even in the toughest applications!

Switch to SINAMICS: Integrate Siemens VFDs with Rockwell Automation PLCs | **S9** *Presented by: Siemens*

TIME: 10:00 AM - 10:50 AM ROOM: COLOGNE

Siemens Drives specialist will discuss and demonstrate how easy it is to control a SINAMICs drive with an AB Logix PLC in minutes. Learn how to easily integrate Siemens drives into Rockwell Automation control architectures. Whether it be communicating with Logix controllers on Ethernet/IP or discontinued PLCs, like PLC-5 or SLC 500, on AB Remote I/O or DeviceNet, SINAMICS drives are up to the task.

What is New in Drives - Next Generation SINAMICS | **S10**

Presented by: Siemens

TIME: 11:00 AM - 11:50 AM ROOM: COLOGNE

Find out what are the latest industry leading innovations integrated into the 3rd Generation SINAMICS G220, S210 New, and S200 drive products. This next generation establishes and sets the bar for a new level of drive-based safety, enhanced product & web security, and future proof adaptability across continuous speed or torque control applications or discontinuous servo motion applications. You will be impressed with what you will learn in this seminar about Siemens Drives and what you can do to enhance your machines or processes.

Advanced Power Supply System - Utilizing ProfiNet & Ethernet IP Communication | S11

Presented by: Siemens

TIME: 2:00 PM - 2:50 PM ROOM: COLOGNE

We'll show how you can utilize The PSU8600 Power Supply System via Profinet and Ethernet IP protocols for your digitalization and Industry 4.0 needs. This innovative power supply system can be fully integrated into Totally Integrated Automation (TIA Portal). The system is useful in networked automation applications with either Ethernet IP or PROFINET interface. This SITOP Power Supply System not only offers diagnostics options, it also supports other Profinet functions like energy management (PROFIenergy). The modular system can be expanded to 36 outputs, multiple voltage outputs and provides buffer and DC UPS modules for protection against power failures.

Machine Safety for 2023 and Beyond: Safety Interlock Technologies and Compliance with Relevant Safety Standards | **S12**

Presented by: IDEM Safety Switches

TIME: 9:30 AM - 10:20 AM ROOM: MUNICH

This presentation is designed to give the attendee an understanding of the wide breadth of Safety Interlock components and technologies available to them for use in their applications & projects combined with an overview of the latest relevant Consensus Safety Standards (ANSI/ ISO/ RIA/ OSHA/ Machinery Directive, etc.) that they should be aware of when designing, building or using automated equipment in the industrial marketplace.

What's New in Controls in 2023 | S13

Presented by: Siemens

TIME: 9:00 AM - 9:50 AM ROOM: DUSSELDORF

Learn about the latest in Siemens Industrial Control products for 2023. See what's happening with exciting and new industrial control products including the updated 3VA MCCB product line expansion, the new 8WD6 IO-Link Signal Columns, the new 3RQ Force Guided Safety Coupling Relays, the new Safety Input 3RT Contactors with low current draw, and the 3RW5 Open and Enclosed soft starters.

Power Distribution Techniques for UL508A Panels | S14

Presented by: Siemens

TIME: 10:00 AM - 10:50 AM ROOM: DUSSELDORF

Explore different methods to streamline panel design reducing engineering, wiring, and panel space while creating a more flexible solution which can easily accommodate late engineering changes and field implementation.

Ethernet/IP connectivity for Motor Starting | S15

Presented by: Siemens

TIME: 11:00 AM - 11:50 AM ROOM: DUSSELDORF

In this seminar we will set up Ethernet/IP communications between a Rockwell PLC and Siemens full/reduced voltage motor starters. We will demonstrate how to use the TIA Portal engineering tool to configure the Siemens devices and then use Studio 5000 to configure the Rockwell PLC and Ethernet/IP communication. 5

Simplify the Concept of Machine Simulation | S16

Presented by: Siemens

TIME: 9:00 AM - 9:50 AM ROOM: BERLIN

When commissioning machines and control systems, how can you reduce the on-site commissioning time and ensure a smooth, safe, and reliable startup? How can you validate the control logic across multiple PLCs, drives and other electrical components before deployment? Join this session to hear how Siemens digital twin and virtual commissioning solutions can address customer start-up challenges.

What's New with Siemens Automation in 2023 | S17

Presented by: Siemens

TIME: 10:00 AM - 10:50 AM ROOM: BERLIN

Join the Factory Automation team for an overview of the latest and greatest SIMATIC product and technology innovations. V18 of the TIA Portal contains lots of impactful new SW features, hardware innovations, and FW updates that you'll want to hear about. Come find out how these latest innovations can help improve your applications, reduce your engineering time and increase your productivity in the coming years.

One I/O system - many networks! | S18

Presented by: Siemens

TIME: 3:00 PM - 3:50 PM ROOM: BERLIN

Join us to see how you can use one world-class IO system as your standard for multiple controller platforms. The ET200SP MultiFieldbus Interface module allows you to easily connect ET200SP IO to PROFINET, EtherNet/IP, and Modbus TCP networks; even sharing IO across multiple networks!

Mastering VFD Cable Selection: Navigating Industrial Challenges and Solutions | **S19**

Presented by: LAPP

TIME: 9:00 AM - 9:50 AM ROOM: NUREMBERG

The ability to withstand the abuses of today's harsh industrial world has become a critical factor in VFD cable selection. The continued advancement of cable performance is due to changes in standard regulations and the increased interest in evaluation of characteristics mandated by the industrial marketplace. Lapp will review the critical elements in cable selection, discuss potential application issues, and compare grounding suggestions for various installations.

Workshops

WinCC Unified Test Drive | W1 & W2

Presented by: Siemens

TIME: 10:00 AM - 11:50 AM & 2:00 PM - 3:50 PM ROOM: NUREMBERG

SIMATIC WinCC Unified is the new visualization system in TIA Portal and scalable from Panel to PC-based systems. In addition to the new WinCC Unified Runtime based on web technology (HTML5, SVG and JavaScript), the WinCC Unified System includes a new generation of high-end HMI devices with multitouch and planned Siemens Industrial Edge support. In this workshop, you'll learn to set up and configure the WinCC Unified Comfort Panel as well as design and configure screens showcasing what's new and different about the latest Siemens HMI software.

Hands On: Basics of PLC Based Motion Control | W3 & W4

Presented by: PCC

TIME: 8:00 AM - 9:50 AM & 2:30 PM - 4:20 PM ROOM: HAMBURG

This hands-on class will allow users to configure and commission a coordinated motion control application using a Siemens TIA based solution. We'll highlight the SIMATIC S7-1500 Technology controller (T-CPU) and SINAMICS S210 servo drives that offers an unprecedented level of integration to solve your motion applications.

Hands on: Configure an IO Link System using TIA Portal | W5

Presented by: Siemens

TIME: 2:00 PM - 3:50 PM ROOM: DUSSELDORF

Siemens has applied the principles of IO-Link to many devices which are traditionally mounted inside the main enclosure. Experience Hands-On TIA Portal setup of IO-Link Motor Starters, Voltage and Current Monitors, and 3SU Pilot Devices including our RFID Selector Switch. Understand how using IO-Link can eliminate and simplify IO wiring, eliminate IO Modules in your PLC or Remote IO Rack, substantially reduce installed cost and labor, all while improving diagnostics and reducing downtime.

Registration Required

Presenting Sponsor:



Siemens & PCC

PCC is the premiere and longest standing Siemens automation channel partner in Wisconsin. Our roots with Siemens date back to 1981 when PCC became a Texas Instruments distributor. Since that time we have continued to be a highlevel, primary technical resource for Siemens users though pre and post-sale consulting, training and technical support. During our decades long partnership with Siemens, we have consistently been recognized as a top channel partner earning many awards at the national level.

Automation Fair Exhibitors & Sponsors:



Thursday September 28th, 2023 | V

West Bend, WI

pccweb.com/oktoberfest