

Event Guide

Process Solutions User Group (PSUG)

November 13-14, 2017

Houston, Texas – George R. Brown Convention Center



LISTEN.
THINK.
SOLVE.

 Allen-Bradley • Rockwell Software

**Rockwell
Automation**



WELCOME TO PSUG 2017

First and foremost, on behalf of Rockwell Automation and our leadership team, I want to thank you for joining us in Houston this year.

As you arrived here today, I'm sure you were all keenly aware of the devastation that Hurricane Harvey brought to the city and the surrounding region. If events like these have taught us anything, it's that the sheer will and constitution of people to help each other will rise to the surface when they need it the most. It is going to be many years before the area is close to complete recovery, and I'm sure that many of you in attendance will be directly or indirectly involved in that process. Whether it's part of your job or your involvement in community outreach, our thoughts and prayers are behind you.



The backdrop of the recovery here in Houston in small way serves as a metaphor for the work that each of you do by battling against time, budget constraints, and customer demands to help produce key needs of the world: things like food, clothing, shelter, medicine, fuel. You are all part of making our lives better.

Over the next two days, you will see how Rockwell Automation plays a crucial role helping engineers, operators and managers overcome everyday challenges and gain greater insight into key production data. You'll hear how they are experiencing greater agility and better quality by leveraging the Rockwell Automation vision of The Connected Enterprise. I encourage you to actively participate in these sessions, share ideas, and learn strategies from some of the most innovative minds in the industry.

We are invested in smarter production technologies, and we are invested in you, our technology users. Together, we can continue to make vital contributions to the world. Together, we can make a real difference in this new era of automated production.

Enjoy your time here in Houston and make the most of your PSUG experience. Once again, we thank you for coming and look forward to an energetic two days.

Sincerely,

Paul J. Galeski
Vice President, General Manager
Global Systems and Solutions Business (SSB)

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PLEASE VISIT OUR EXHIBITORS

Located near the Welcome Desk on Level 3





QUESTIONS

If you have any questions during your stay, please contact any one of the Rockwell Automation hosts at the PSUG Welcome Desk. The Welcome Desk is located on Level 3 of the George R. Brown Convention Center near PSUG registration.



FREE WIRELESS

Complimentary wireless internet is available to attendees throughout the main PSUG convention space and foyers. Wireless coverage within each session room may not be available.

Please refer to the event app to obtain the wireless password.



MONDAY HOSPITALITY

If you registered to attend the Monday night event, it will be held at Minute Maid Park from 6:30 p.m. - 10:00 p.m. You MUST have your PSUG badge with you to attend the event. Minute Maid Park is within walking distance of PSUG. Please enter Minute Maid Park near the clock tower entrance of the stadium, which is located at the corner of Preston St. and Texas Ave.

GUEST ATTENDANCE

If you have paid for a guest to accompany you to Minute Maid Park, you should have received their badge, along with your badge, during PSUG registration. If not, please seek assistance at the PSUG Welcome Desk as soon as possible. Due to confirmed attendee counts with Minute Maid Park, we will be unable to accommodate any on-site guest registration for Minute Maid Park.



SHUTTLE BUS INFORMATION

HOTEL SHUTTLES

Complimentary shuttles will be provided to and from the following Automation Fair® event hotels and the George R. Brown Convention Center each morning and afternoon/early evening.

- Aloft Houston
- Doubletree Houston Downtown
- Hampton Inn & Homewood Suites
- Hyatt Regency Houston
- Sam Houston Hotel
- The Whitehall Houston

Please note, transportation will not be provided from the Hilton Americas - Houston, Marriott Marquis Houston, Embassy Suites Houston Downtown.

HOURS OF OPERATION:

Monday, November 13: 6:30 - 10:00 a.m. and 3:00 - 8:00 p.m.

Tuesday, November 14: 6:00 - 10:00 a.m. and 2:00 - 7:00 p.m.



MEALS

Monday lunch, Tuesday breakfast and Tuesday lunch will be provided in the Grand Ballroom on Level 3, of the convention center. (See agenda for exact times). Morning and afternoon refreshment and snack breaks will be offered in the hallways adjacent to the Breakout Sessions.



DOWNLOAD OUR NEW MOBILE APP

We encourage you to download our new mobile app - search for Rockwell Automation Events app in your app store and click on the PSUG option. The mobile app provides the means to vote on future development priorities for our systems and products, provides the latest information on PSUG, and allows you to rate and provide feedback on each individual session you attend.



SESSION FEEDBACK

Your feedback is welcomed and encouraged. Please evaluate the individual sessions you attend by completing the session survey located in the Rockwell Automation PSUG mobile app.



VOICE OF CUSTOMER SURVEYS

We want to hear from you on future development priorities. If you have not already taken these surveys prior to your arrival at PSUG, we encourage you to do so. Results of your feedback will be revealed on Tuesday in the closing session of PSUG.

The surveys are located in the Rockwell Automation PSUG mobile app OR we have dedicated computers on Level 3, near the PSUG Welcome Desk. See page 8 for more information. Please provide direct feedback on: PlantPax® Core System, Rockwell Automation Library of Process Objects, Process Optimization (Model Predictive Control) and Batch Management.



MEDICAL/SECURITY

For all emergencies, please immediately notify the George R. Brown Convention Center Security Desk at (713) 853-8087.



PROFESSIONAL DEVELOPMENT HOUR CREDITS

All PSUG attendees can earn Professional Development Hours (PDHs) and a Certificate of Completion for attending Technical Sessions and Hands-on-Labs. This is the primary reason we scan your badge upon entering a Technical Session or Hands-on Lab. Attendees that completed any of these classes are sent an e-mail they can use to log on and access a transcript of completed classes and to print the official "Certificate of Completion" for each class. The transcript of classes can be used to pursue your PDH certification.

Available PDH credits are as follows:

- **Technical Session = 1 PDH**
- **Hands-On Lab = 1.5 PDHs**



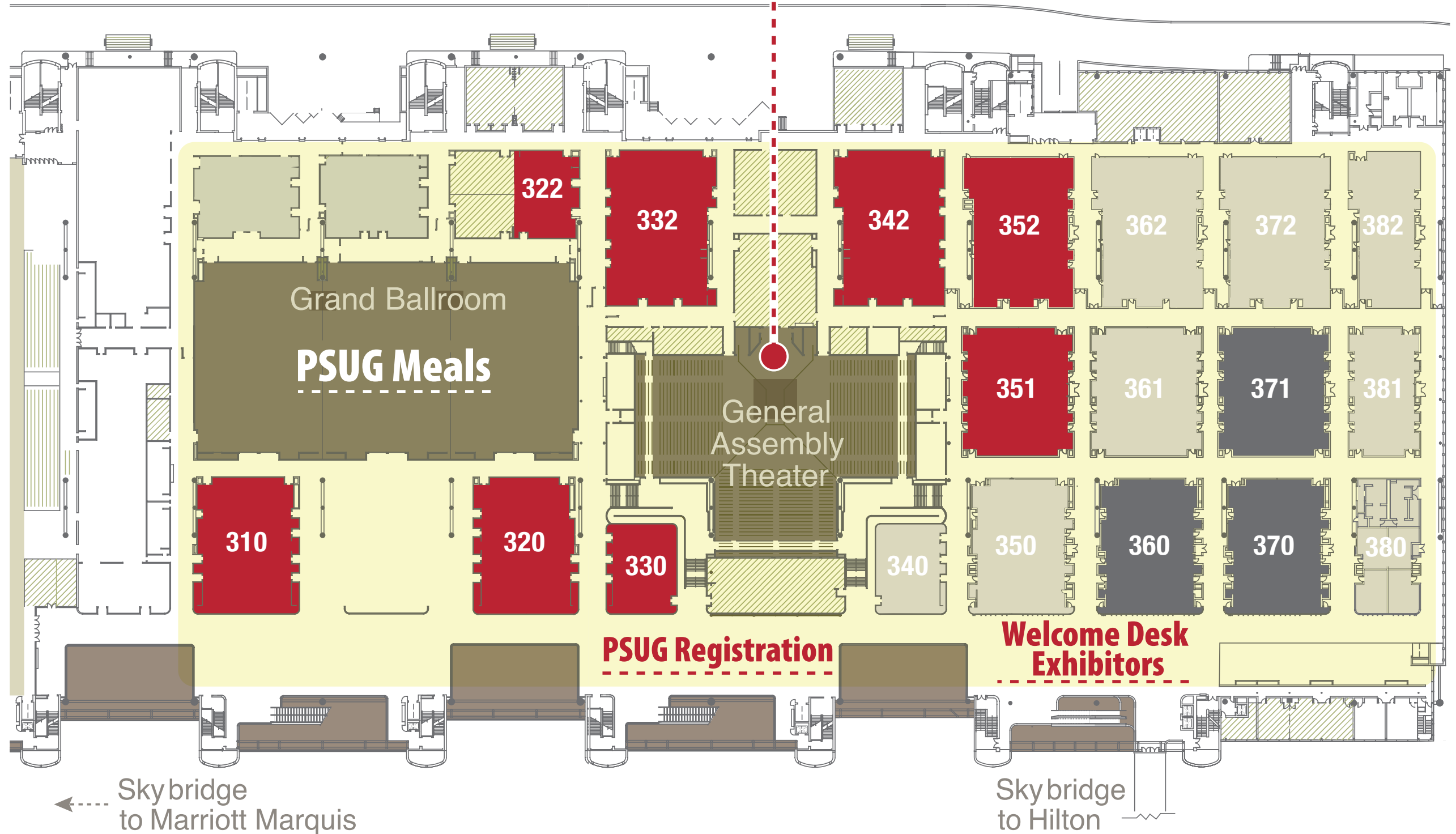
George R. Brown
Convention Center

LEVEL 3

Technical Sessions
Customer Applications
Ask The Experts

Hands-On Labs

PSUG General Sessions





DOWNLOAD OUR NEW MOBILE APP

Search your app store for the Rockwell Automation Events App and select the PSUG option.

It allows you to:

- Register to attend sessions
- Create your own agenda
- Search sessions, speakers and exhibitors
- Stay up to date on event news
- Network with other attendees
- Share your thoughts on the Live Networking Feed and in surveys

CUSTOMER FEEDBACK

We value your opinion about future development priorities at Rockwell Automation. Please take the time to talk about your requirements by filling out the Voice of Customer surveys located in the mobile app. Survey topics include:

- PlantPAX Core System
- Rockwell Automation Library of Process Objects
- Process Optimization (Model Predictive Control)
- Batch Management

Voice of Customer Surveys completed by 10 a.m. on Tuesday, November 14 will be included in the collective feedback delivered during the closing ceremony of PSUG. You can also take the surveys using the computers located near the welcome desk area.

Attendees who have provided feedback will be eligible to win prizes at the closing ceremony of PSUG. You must be present to win.



COMPLETE *VOICE OF CUSTOMER* SURVEYS FOR A CHANCE TO WIN THESE GREAT PRIZES

- iPad Pro 9.7-inch
- 1MORE Triple Driver In-Ear Headphones
- Polaroid ZIP Mobile Printer
- Micro+ 3-D Printer



Only attendees who have provided feedback will be eligible for these prizes at the end of PSUG. You must be present to win.

* Rockwell Automation employees are not eligible. M3D, Apple, Polaroid and 1MORE are not affiliated with the promotion of this Rockwell Automation Event. Smart phone not included with Portable Solar Charger. Laptop not included with 3-D Printer.


HEARTBEAT + MINDSET



Experience Heartbeat Technology - Booth #1641

Imagine your devices had their own pulse. They would tell you how healthy they were and what you could do to improve the performance of your process. **Heartbeat** Technology™ breathes life into your devices. It provides you with diagnostics, verifies performance and monitors process data to support optimization and predictive maintenance strategies. Our engineers listen carefully to you and understand your **Mindset**. It is their job to find the best fitting products with Heartbeat Technology to deliver increased operational availability for your plant.



 Find out more about the Heartbeat Technology on www.yourlevelxperts.com/heartbeat

Endress+Hauser 
People for Process Automation

AGENDA





MONDAY: NOVEMBER 13

ROOMS	310AB	320AB	332ABDE	342ABDE	351ABDE	310C	320C	322AB	332CF	330AB
8:00 am	TS14: The Six: Fundamental Regulatory Process Control Strategies	TS02: Defining and Sizing PlantPax® Systems - Architectures and Best Practices	TS10: Manage Your Automation Asset Investments with FactoryTalk® AssetCentre	TS21: Automation Productivity Tool – Studio 5000® Application Code Manager	TS13: Migration Tools to Convert Your Legacy DCS and PLC-5® Systems to the PlantPax® System	TS12: Hazardous Area Applications: Advantages of Intrinsically Safe Distributed I/O and What's New	TS25: Enterprise Optimization: Using Control Loop Analytics To Contribute To Continuous Process Improvement (Control Station)	TS17: How to Improve Plant Operations Through Better HMI Displays		
9:00 am	TS01: PlantPax®: What's New and What's Next	TS07: Deploy and Manage a Virtualized PlantPax® System	TS03: Implementation of PlantPax® Systems – Best Practices and What's New	TS16: Project Design Considerations for Integration of OEM Skid Equipment with PlantPax® DCS	TS22: From supplier to partner; the journey from field measurements to smart decisions in real time (E+H)	TS18: What's New and Coming in PlantPax® System I/O	TS23: Using Leading and Lagging Indicators to help improve Process Safety (exida)	TS26: The Evolution of the Digital Oilfield Through IoT (Cisco)		
10:00 am	Break									
10:30 am	PSUG 2017 Opening General Session and Keynote (General Assembly)									
12:00 pm	Lunch (Grand Ballroom)									
1:00 pm	Process Roadmap (General Assembly)									
2:00 pm	Break									
2:15 pm	TS05: Exploring the Functionality of the Rockwell Automation® Library of Process Objects	TS04: Administration and Maintenance of PlantPax® Systems - Best Practices and What's New	TS15: Industrial Control System Security Standards – What They Mean to You	CS08: Frames (Oil & Gas)	CS05: Phillips 66 (Petrochem/ Oil/Pipeline)	CS11: Maverick (Chemical)	CS19: Automation Plus (Chemical)	CS04: Champion Technology Services (Chemical/ Agriculture)		CS20: Interstates Control Systems, Inc. (CPG - Cybersecurity)
3:15 pm	TS06: Exploring the New Features and Capabilities for Version 4.0 of the Rockwell Automation® Library of Process Objects	TS19: Navigating Recent Changes in Process Safety Standards	TS24: Nuisance Alarms and the Boy Who Cried Wolf – How to Create a Happy Ending (exida)	CS25: Braskem Idesa (Oil & Gas)	CS03: El Paso WWTP (Water/ Waste Water)	CS17: AGIDENS (Oil & Gas)	CS01: Applied Control Engineering (Chemical)	CS07: Dupont (Specialty Chemical - Batch)		CS02: SAGE Automation (Explosives)
4:15 pm	Break									
4:30 pm	TS08: Batch Management: Overview and What's New	TS20: ThinManager®: Delivering and Managing Content in the Connected Enterprise	TS09: Securing and Connecting Your PlantPax® Systems to the Enterprise: Best Practices	TS11: Team Collaboration and Productivity Improvements with the FactoryTalk TeamONE™ App		CS13: MSU/ Rovisys (Power Generation)	CS14: Oxyvinals Matrix (Chemical - Batch)	CS09: Hatch (Mining)	CS10: Kimberly-Clark (Pulp and Paper)	CS23: Baosight Chemical (Coal Chemical, Gas Refining)
5:30 - 6:30 pm	Break									
6:30 -10:00 pm	DINNER AND NETWORKING AT MINUTE MAID PARK - HOME OF THE HOUSTON ASTROS									

342CF	351CF	352DE	371BE	370ABDE	370F	371AD	360BE	360AD	360CF
				HOL05: Using Modern FactoryTalk® Batch Features and Interfaces to Enhance Operating Effectiveness	HOL06: AADvance® Process Safety Implementation Lab	HOL09: Model Predictive Control Within the Logix Controller		HOL01: Basic Stratix® Switch and EtherNet/IP Features in Converged Plantwide Ethernet (CPwE) Architectures	
Break									
PSUG 2017 Opening General Session and Keynote (General Assembly)									
Lunch (Grand Ballroom)									
Process Roadmap (General Assembly)									
Break									
CS18: Alnylam Pharmaceuticals (Life Sciences)	CS06: Desmet Ballestra North America (Food & Bev)	CS12: Optimization (Animal Nutrition - Batch)	HOL10: PlantPax® Process Application Development	HOL04: Defining and Sizing PlantPax® Systems – Using the PlantPax® System Estimator		HOL08: Truly Distributed Batch: Deploying Controller-Based Sequences with FactoryTalk® Batch	HOL02: ThinManager® Experience the Platform's Power and Simplicity		HOL03: Introduction to Network Security Lab
CS22: Grifols Diagnostic Solutions, Inc. (Life Sciences)		CS21: Colorado State University (Brewing)							
Break									
CS16: Trident (Biofuels)	CS15: Kraft Heinz Company (Food & Bev - MPC)								
Break									
DINNER AND NETWORKING AT MINUTE MAID PARK - HOME OF THE HOUSTON ASTROS									



TUESDAY: NOVEMBER 14

ROOMS	310AB	320AB	332ABDE	342ABDE	351ABDE	310C	320C	322AB	332CF	330AB
7:00 am	Breakfast (Grand Ballroom)									
8:00 am	TS14: The Six Fundamental Regulatory Process Control Strategies	TS02: Defining and Sizing PlantPax® Systems - Architectures and Best Practices	TS03: Implementation of PlantPax® Systems - Best Practices and What's New	TS12: Hazardous Area Applications: Advantages of Inherently Safe Distributed I/O and What's New		CS05: Phillips 66 (Petrochem/Oil/Pipeline)	CS11: Maverick (Chemical)	CS02: SAGE Automation (Explosives)	CS18: Alnylam Pharmaceuticals (Life Sciences)	CS06: Desmet Ballestra North America (Food & Bev)
9:00 am	TS01: PlantPax: What's New and What's Next	TS07: Deploy and Manage a Virtualized PlantPax® System	TS11: Team Collaboration and Productivity Improvements with the FactoryTalk TeamONE™ App	TS18: What's New and Coming in PlantPax® System I/O	TS26: The Evolution of the Digital Oilfield Through IoT (Cisco)	CS09: Hatch (Mining)	CS03: El Paso WWTP (Water/Waste Water)	CS25: Braskem Idesa (Oil & Gas)	CS08: Frames (Oil & Gas)	
10:00 am	Break									
10:15 am	TS05: Exploring the Functionality of the Rockwell Automation® Library of Process Objects	TS04: Administration and Maintenance of PlantPax Systems - Best Practices and What's New	TS08: Batch Management: Overview and What's New	TS15: Industrial Control System Security Standards – What They Mean to You	TS13: Migration Tools to Convert Your Legacy DCS and PLC-5® Systems to the PlantPax® System		CS07: Dupont (Specialty Chemical - Batch)	CS04: Champion Technology Services (Chemical/Agriculture)	CS23: Baosight Chemical (Coal Chemical, Gas Refining)	CS20: Interstates Control Systems, Inc. (CPG - Cybersecurity)
11:15 am	TS06: Exploring the New Features and Capabilities for Version 4.0 of the Rockwell Automation® Library of Process Objects (Reed)	TS19: Navigating Recent Changes in Process Safety Standards (Fontenot)	TS09: Securing and Connecting Your PlantPax® Enterprise: Best Practices	TS24: Nuisance Alarms and the Boy Who Cried Wolf – How to Create a Happy Ending (exida)	TS22: From Supplier To Partner; The Journey From Field Measurements To Smart Decisions In Real Time (E+H)	CS17: AGIDENS (Oil & Gas)	CS14: Oxyvinals/Matrix (Chemical - Batch)	CS01: Applied Control Engineering (Chemical)		CS21: Colorado State University (Brewing)
12:15-1:15 pm	Lunch (Grand Ballroom)									
1:30 pm	TS25: Enterprise Optimization: Using Control Loop Analytics To Contribute To Continuous Process Improvement (Control Station)	TS23: Using Leading and Lagging Indicators to help improve Process Safety (exida)	TS17: How to Improve Plant Operations Through Better HMI Displays	TS21: Automation Productivity Tool – Studio 5000® Application Code Manager	TS16: Project Design Considerations for Integration of OEM Skid Equipment with PlantPax® DCS (Wright)		CS19: Automation Plus (Chemical)	CS10: Kimberly-Clark Corp (Pulp and Paper)	CS13: MSU/Rovisys (Power Generation)	CS22: Grifols Diagnostic Solutions, Inc. (Life Sciences)
2:30 pm	E01: Ask The Experts - Scalable Analytics	E02: Ask The Experts - Networks & Security	E03: Ask The Experts - PlantPax® System Design And Deployment	E04: Ask The Experts - Critical Control And Process Safety	E05: Ask The Experts - IMC/PlantPax® Integration	TS20: ThinManager® Delivering and Managing Content in the Connected Enterprise				
3:30 pm	E01: Ask The Experts - Scalable Analytics	E02: Ask The Experts - Networks & Security	E03: Ask The Experts - PlantPax® System Design And Deployment	E04: Ask The Experts - Critical Control And Process Safety	E05: Ask The Experts - IMC/PlantPax® Integration	TS10: Manage Your Automation Asset Investments with FactoryTalk® AssetCentre				
4:30-5:00 pm	PRODUCT DEVELOPMENT VOTING RESULTS AND PSUG CLOSE									

ROOMS	342CF	351CF	352DE	371BE	370ABDE	370F	371AD	360BE	360AD	360CF
7:00 am	Breakfast (Grand Ballroom)									
8:00 am	CS16: Trident (Biofuels)				HOL05: Using Modern FactoryTalk® Batch Features and Interfaces to Enhance Operating Effectiveness	HOL06: AADvance® Process Safety Implementation Lab	HOL09: Model Predictive Control Within the Logix Controller			HOL03: Introduction to Network Security Lab
9:00 am										
10:00 am	Break									
10:15 am	CS15: Kraft Heinz Company (Food & Bev - MPC)			HOL10: PlantPax® Process Application Development	HOL04: Defining and Sizing PlantPax® Systems – Using the PlantPax® System Estimator		HOL07: Controller-based Batching Using SequenceManager	HOL02: ThinManager® Experience the Platform's Power and Simplicity		
11:15 am	CS12: Optimation (Animal Nutrition - Batch)									
12:15-1:15 pm	Lunch (Grand Ballroom)									
1:30 pm							HOL08: Truly Distributed Batch: Deploying Controller-Based Sequences with FactoryTalk® Batch		HOL01: Basic Stratix® Switch and EtherNet/IP Features in Converged Plantwide Ethernet (CPwE) Architectures	
2:30 pm										
3:30 pm										
4:30-5:00 pm	PRODUCT DEVELOPMENT VOTING RESULTS AND PSUG CLOSE									

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- We'll explain how the Hardy Dynamics Checkweigher integrates with The Connected Enterprise®
- We'll show you the benefits of Open Source (programmable with Studio 5000®), Off-the-Shelf (made with Allen Bradley® components) and Seamless Integration (FactoryTalk® data management)
- Use real-time data to optimize upstream processes or create closed-loop control by exchanging tags with other devices on the network

VISIT us at BOOTH #633 at AUTOMATION FAIR!

- For 99 years we have been successfully helping manufacturers, SI's and OEM's
- For 25 years we have been a committed Rockwell Automation Encompass™ Partner
- Our products are engineered and manufactured in the USA



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- Hardy Dynamics in-motion checkweigher based on Rockwell Automation components
- Integrated Panel Solutions in NEMA 4 or 4X enclosures
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KEYNOTE SPEAKERS CUSTOMER ADVISORY BOARD





SPEAKERS



Stephen E. Pulsifer

Global Director, Process Market Development, Rockwell Automation

Steve leads all Marketing and Commercial Program activities as they relate to the Rockwell Automation Process business. He joined Rockwell Automation in 2007 after previously holding various positions at Analog Devices Semiconductor (Wilmington, MA), Total Control Products (Melrose Park, IL), a start-up company that was a designer and manufacturer of industrial software, operator interfaces and control technology, and GE Fanuc Automation (Charlottesville, VA) once TCP was acquired. In 2000, Steve moved into strategic marketing and became the Critical Power Market Development Manager and then the Life Sciences Market Development Manager. In 2003, he served as Global Healthcare Product Marketing Manager at GE Measurement and Control and then as Marketing Operations Leader.

Steve holds a Bachelor of Sciences degree from Northeastern University (B.S.B.A.) in Management Information Systems and a Computer Electronics Degree (C.E.) from GTE Sylvania/Wentworth Technical School. He also has been trained as a Green Belt & Black Belt in Six Sigma.



John Genovesi

Vice President, General Manager, Information Software and Process Business, Rockwell Automation

John Genovesi is Vice President, General Manager of Rockwell Automation Information Software and Process Business. Genovesi is responsible for leading global growth, product development, solution delivery, sales and support strategies that deliver value based solutions to our customers. In addition, his team helps clients deploy process and software solutions that help them along the journey of achieving a "Connected Enterprise". Most recently John's team released a strategy to help customers with Information Solutions which delivers scalable information platforms, IIoT and analytic solutions for deployment on premises and in the cloud.

Genovesi's prior role was Vice President, Global Accounts since 2008, and Vice President Industry Solutions in 2006. Prior to that he held positions as District Manager in Ohio, West Virginia and Western Pa, and Branch Manager in Western NY. Genovesi joined Rockwell Automation in 1989 in Buffalo, NY.

Genovesi holds a master of Business Administration (MBA) degree from Case Western Reserve University, in Cleveland Ohio. He also has a Bachelor of Science degree in Electrical Engineering from Youngstown State University.



Jason Wright

PlantPax Business Manager, PlantPax System, Rockwell Automation

Jason P. Wright (JP) is the PlantPax Business Manager for Rockwell Automation. JP has over 20 years of experience in the process control industry having worked and played leadership roles at a control system integrator, another large DCS provider, a process control consulting firm, and a biotechnology manufacturing end user. Currently, JP is responsible for driving the PlantPax Distributed Control System development priorities to meet the evolving needs of the process industry. JP is a senior member and past District Vice President of ISA. JP holds a Bachelor of Science degree in Systems and Control Engineering from Case Western Reserve University and a Masters of Business Administration from Kent State University.



Paul J Galeski,

Vice President, General Manager, Global Systems and Solutions Business (SSB)

Paul J Galeski, PE, CAP is the vice president and general manager for the global Systems and Solutions Business (SSB). Paul is the founder of MAVERICK, which was acquired by Rockwell Automation in October 2016. MAVERICK was founded in 1999 as a leading systems integrator, primarily for process automation solutions and services, with over 300 engineers with deep domain expertise to serve our customers. In addition to his entrepreneurial background founding and leading two successful companies, he has also worked in engineering roles at Monsanto, Anheuser-Busch and McDonnell Douglas Corp.

He attended Southern Illinois University and graduated with a Bachelor's in Electrical Engineering in 1983. Paul was recognized by Ernst & Young's Entrepreneur of the Year Program as the Emerging Entrepreneur of the Year for the State of Illinois in 2002. Paul is a graduate of the GE executive management school in Crotonville, NY. He is also a graduate of President's executive education program at Harvard Business School. Paul is a licensed professional engineer, certified automation professional (CAP), a Fellow Member of the International Society of Automation and an inaugural member of the Southern Illinois University Alumni Hall of Fame.



Jim Winter

Director, Global Process Business, Rockwell Automation

Jim joined Rockwell Automation in 2015 and is responsible for the Global Process Business. Jim leads the PlantPax system evolution and the implementation of company-wide strategies to ensure the global process automation business meets customer's needs. Previously, Jim held various positions during his sixteen years with Emerson Process Management. Most recently, he was Director of Plant Turnaround and Lifecycle Services where he was responsible for developing and executing global strategies to drive incremental business across Emerson's customer base. Prior to that, Jim held product development and system deployment roles with Emerson. He was a systems engineer with Honeywell – Industrial Automation and Control and Bailey Controls (ABB) focused on boiler control and optimization. Jim holds a Bachelor of Science degree in Chemical Engineering from Arizona State University and an Executive Master of Business Administration degree from the University of Texas.



R. Barry Holtz, Ph.D. Bio

President, iBio CDMO, LLC

Dr. Holtz is a serial entrepreneur in biotechnology spanning a 30+ year career. He has founded or co-founded multiple biotech companies including: Large Scale Biology, Caliber Biotherapeutics (now iBio CDMO) and G-CON. He holds 24 US Patents in areas of bioprocess development. He is currently President of iBio CDMO a commercial developer and producer of biotherapeutics.



CUSTOMER ADVISORY BOARD

The Customer Advisory Board represents a broad set of companies from the process industries that provide direction for the Process Solutions User Group, drive product and solution requirements by acting as a consultant to Rockwell Automation, and share best practices across companies and industries. They are readily available to answer any questions you may have about PSUG 2017.



Todd Anslinger
Control Systems Engineer
Chevron



Ronan Bane
Senior Manager - Automation
GEA Process Engineering Inc.



Greg Bixler
Electrical Engineering Technical Leader
Kimberly-Clark



Eric Blevins
Control Systems Engineer
Eastman Chemical Co.



Doyle Broom
I&C Project Execution Advisor
ExxonMobil



Ted Douglas
Senior Automation Engineer
Pfizer



Larry Grate
Director of Technology
PREMIER System Integrators



Jay Hardison
Instrumentation and Controls Technologist
CH2M



Ed Hutchins
Manager Control Systems Engineering
American Electric Power



Roland Joseph
Technical Section Lead
Procter & Gamble Co.



Jim Labonty
Director, PGE Process Automation
Pfizer, Inc.



David Moore
Superintendent Process Control
Potash Corporation



Gabriel Rivera
Automation & Process Control Senior Consultant
DuPont



John Steckler
Process Automation Manager
Archer Daniels Midland Company



Jerry Steenhoek
Chief Technologist
Interstates Control Systems, Inc.

TECHNICAL SESSIONS HANDS-ON LABS CUSTOMER APPLICATIONS ASK THE EXPERTS





TECHNICAL SESSIONS

TS01: PlantPax® System: What's New and What's Next

Tim Schmidt, Global Process Marketing Lead, Rockwell Automation

Discover the newly released features of the PlantPax® distributed control system and what's ahead for the upcoming release. Explore each new feature in depth and learn about the benefits this modern DCS offers compared to traditional DCS systems.

TS02: Defining and Sizing PlantPax® Systems – Architectures and Best Practices

Daniel Severino, PlantPax Product Manager, Rockwell Automation

Greylin Gimenez, Project Engineer, Rockwell Automation

Need to confirm proper sizing for a new system or a system expansion? Want to ensure your system is designed for optimal performance? This session explores the latest Rockwell Automation® tools, capabilities and guidelines to help you define and size the appropriate PlantPax® system architecture based on your project requirements. We will review architecture rules and the latest PlantPax® System Estimator capabilities including virtualization, networking and licensing considerations.

TS03: Implementation of PlantPax® Systems - Best Practices and What's New

Dave Rapini, PlantPax Product Manager, Rockwell Automation

Implementing a DCS successfully requires engineering efficiency and consistent delivery. In this session, you'll learn how to bring the Rockwell Automation® PlantPax® DCS to the market faster using the latest capabilities and guidelines for implementation. Discover ways to deploy your PlantPax® system efficiently using tools that increase productivity, and leverage best practices from field experience. See the new capabilities provided by the latest PlantPax® System release and get a preview of future releases.

TS04: Administration and Maintenance of PlantPax® Systems - Best Practices and What's New

John Cousins, Manager PlantPax System Development, Rockwell Automation

Nick Putman, Project Test Engineer, Rockwell Automation

Are you looking for guidance on keeping your system current and healthy? Learn the latest guidelines and tools for the administration and maintenance of the PlantPax® system. See new guidance and tools being provided this year and get a preview of what's coming in future releases.

TS05: Exploring the Functionality of the Rockwell Automation® Library of Process Objects

Dale Reed, C.A.P., Principal Engineer, Rockwell Automation

The Rockwell Automation® Library of Process Objects lets you quickly develop process solutions with rich functionality and known performance. In this session, objects in the library and their functions within a typical process control system will be presented. Common library features such as modes, alarms, and features for operations, maintenance and engineering personnel will be explained. The upcoming 4.0 library release will be highlighted. Walk away with tools to more effectively develop, operate and maintain process systems.

TS06: Exploring the New Features and Capabilities for Version 4.0 of the Rockwell Automation® Library of Process Objects

Dale Reed, C.A.P., Principal Engineer, Rockwell Automation

Russ Brandes, Senior System Project Engineer, Rockwell Automation

Michael Rudder, Senior System Engineer, Rockwell Automation

This session is an in-depth discussion of the new features and capabilities being incorporated into version 4.0 of the Rockwell Automation® Library of Process Objects. Topics will include the new Command Source and HMI Security models, object ownership, combined dosing instruction, support for Logix 5x80 controllers, and various changes to Intelligent Motor Control objects.

TS07: Deploy and Manage a Virtualized PlantPax® System

Daniel Severino, PlantPax Product Manager, Rockwell Automation

Nick Putman, Project Test Engineer, Rockwell Automation

Virtualization helps extend the life of your control system, optimize computing resources, and increase system uptime, while helping you maintain and secure your system. In this session, we will leverage VMWare software to demonstrate deployment of the PlantPax® Virtual Image Templates and you will learn to use Microsoft Remote Desktop Services, Rockwell Automation® Licensing and ACP ThinManager® to improve your system's accessibility and security.

TS08: Batch Management: Overview and What's New

Dan UpDyke, Batch Product Manager, Rockwell Automation

The Rockwell Automation® modern batch solution leads to new productivity gains through ground breaking new products. This session explores the features and new capabilities of FactoryTalk® Batch Version 13 software, controller-based sequencing with the SequenceManager™ solution, and new mobility capabilities. The session also previews upcoming capabilities of the Rockwell Automation® batch and sequencing portfolio.

TS09: Securing and Connecting Your PlantPax® Systems to the Enterprise: Best Practices

Fabiano Fernandes, PlantPax System Architect, Rockwell Automation

Integrating your PlantPax® systems with your enterprise enables better visibility and collaboration that can help improve your bottom line. In this session, you will learn best practices to make this integration happen, including standard reference architectures and the latest in security and application guidelines. Discover how these capabilities align with The Connected Enterprise, as well as implications of establishing an enterprise data infrastructure and/or cloud-based applications.

TS10: Manage Your Automation Asset Investments with FactoryTalk® AssetCentre

Scott Oakley, Product Manager, Rockwell Automation

Design and Operating teams need to easily monitor field device health status and resolve potential issues before they become costly problems. PlantPax® systems leverage FactoryTalk® AssetCentre to manage all your system elements and critical devices to gain comprehensive asset management capabilities such as device configuration, calibration management, and automated backups/restore.

TS11: Team Collaboration and Productivity Improvements with the FactoryTalk TeamONE™ App

Kyle Reissner, Mobile Leader, Rockwell Automation

This session will introduce and give first-hand live demo experience of key features in the new FactoryTalk® TeamONE™ application platform. See how this unique "app" can help drive better team collaboration, monitor critical alarms and events, access latest device trends and gain insight through real-time analytics – all through an instantly available app that expands based off your needs. This is an overview session with a projected live demo, but it's encouraged to 'BYOD' and download the FactoryTalk TeamONE Free Edition app beforehand from the Apple App or Google Play Store to follow along in the session.

TS12: Hazardous Area Applications: Advantages of Intrinsically Safe Distributed I/O and What's New

Joseph Rosing, Product Manager, Rockwell Automation

Intrinsic safety is a commonly used explosion protection method. This presentation will review key considerations for equipment in hazardous areas and specifically illustrate the advantages of using intrinsically safe 1719 Ex I/O as a solution for explosion protection. Discover new solutions for Division 1 installations and application-specific examples.

TS13: Migration Tools to Convert Your Legacy DCS and PLC-5® Systems to the PlantPax® System

Chris King, PlantPax Migration Business Development Manager, Rockwell Automation

Armand Prezioso, PlantPax Product Manager, Rockwell Automation

Mike Vernak, Global Process Marketing Leader, Rockwell Automation

Are today's optimization and innovation demands hampered by your old process control system? Is support for your legacy DCS diminishing? This session will explore the advantages of migrating your legacy DCS or PLC-5® – systems to the PlantPax® system. You will learn about tools that are available from Rockwell Automation® that can help you migrate your systems at a pace that's comfortable for you.

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TS14: The Six: Fundamental Regulatory Process Control Strategies

Dale Reed, C.A.P., Principal Engineer, Rockwell Automation

In this session, gain an understanding of six fundamental regulatory control strategies and learn how to implement them using the Rockwell Automation® Library of Process Objects. Descriptions, code and demonstrations on running hardware are provided for PID Feedback, Feedforward, Cascade, Ratio, Split-Range and Override Select.

TS15: Industrial Control System Security Standards – What They Mean to You

Alex Nicoll, Industrial Security Architect, Advanced Technologies, Rockwell Automation

With cyber attacks rising in frequency and sophistication, producers must work diligently to mitigate the threats that jeopardize their operations. Join this session for an overview of the IEC 62443 security standards, specifically the System and Component portions, and discover how you can use it to help reduce cyber security risk on the plant floor.

TS16: Project Design Considerations for Integration of OEM Skid Equipment with PlantPax® DCS

JP Wright, Business Development Manager, Rockwell Automation

David Enlow, Global Process Technical Consultant, Rockwell Automation

Skid integration can cost as much as 50-70% of the skid acquisition costs. Learn best practices of how to plan and specify OEM skids based on your requirements to reduce these costs and ensure successful projects. Gain practical advice of how to leverage the modular capabilities of the system to implement integration for improved operations and to enable The Connected Enterprise.

TS17: How to Improve Plant Operations Through Better HMI Displays

Daniel Zinzow, User Experience Architect, Rockwell Automation

Ben Henderson, Visual Design Lead, Rockwell Automation

Plant operators make decisions every day which can directly influence profitability. In this session, we'll equip you with the tools you need to create meaningful displays that present the right amount and type of visual detail to enable improved operational efficiency and promote better decision making.

TS18: What's New and Coming in PlantPax® System I/O

Joseph Rosing, Product Manager, Rockwell Automation

Explore newly released and future I/O offerings from Rockwell Automation®. Discover FLEX 5000™ I/O, which provides enhanced communication with 1GB EtherNet/IP™ connectivity. Learn how to leverage the flexibility of FLEX 5000™ I/O to meet your application requirements with mix-and-match capability of standard and safety modules up to SIL3 rating and support for Copper and Fiber Ports (SFP) along with Star, Ring and PRP topologies.

TS19: Navigating Recent Changes in Process Safety Standards

Kirk Fontentot, TÜV FSEng, Process Safety Business Development Manager, Rockwell Automation

It's been more than 10 years since the International Electrotechnical Commission's first release of IEC 61511 - "Functional Safety: Safety Instrumented Systems for the Process Industry Sector." The most recent updates may very well impact your approach to process safety. Find out what has changed, how it might affect your company, who can you hire to assist you, and much more.

TS20: ThinManager® Delivering and Managing Content in The Connected Enterprise

Doug Coulter, Product Manager, ThinManager, Rockwell Automation

ThinManager® is a powerful platform designed to simplify the way productivity content is delivered, and devices are managed within manufacturing environments. Learn how ThinManager® can revolutionize everything from the plant floor to the control room, change the way you view mobility in those areas, and deliver and manage The Connected Enterprise today. In addition, this session will reveal what to look for in the 10.0 release due out later this year.

TS21: Automation Productivity Tool – Studio 5000® Application Code Manager

Lorenzo Majewski, Product Manager, Rockwell Automation

Want to quickly build your automation projects using reusable code – instead of programming? This session demonstrates the newest Studio 5000® Application Code Manager (ACM) capabilities. Walk through use of configuration – selecting library objects and providing configuration data – with the end result of an ACD file, which can be downloaded to a controller to help you reduce risk, cost and time to market for your project

TS22: From Supplier to Partner; the Journey from Field Measurements to Smart Decisions in Real Time

Tracy Doane-Weideman, National Product Marketing Manager, Analysis Products, Endress+Hauser

The Industrial Internet of Things (IIoT) has classic and technical definitions as it applies to field measurement and control. This study shows how vendors of off the shelf technology partnered to develop a real-time solution for chemical control for cooling tower corrosion control.

TS23: Using Leading and Lagging Indicators to Help Improve Process Safety

Steve Gandy, VP Global Business Development, exida Consulting LLC

There are prime examples of where not paying attention to leading and lagging indicators has resulted in catastrophic events, such as the Texas City Isomerization Unit explosion in 2005. The presentation explores how these metrics can be used effectively to improve Process Safety and why it's so important.

TS24: Nuisance Alarms and the Boy Who Cried Wolf – How to Create a Happy Ending

Todd Stauffer, Director Alarm Management, exida LLC

Nuisance alarms cause operators to lose situation awareness and ignore alarms, potentially leading to incidents. This presentation will discuss techniques for eliminating them (taken from ISA-18.2). It will also discuss how human factors impact operator behavior; why operators ignore alarms, mental models, confirmation bias, and the components of human error.

TS25: Enterprise Optimization: Using Control Loop Analytics to Contribute to Continuous Process Improvement

Robert Rice, Vice President Engineering, Control Station, Inc.

Chris Christie, Process Control (Research) Engineer, Engineering R&D, Cargill

Hidden in your process data are the details of impending issues set to impact production, quality, throughput, and energy consumption. Take action! With the right tools, you can proactively uncover performance issues and achieve new levels of profitability. In this session, you'll discover how Cargill used PlantESP for early detection, verifiable analysis and actionable insights to drive improvement in process efficiencies and regulatory control.

TS26: The Evolution of the Digital Oilfield Through IoT

Fazil Osman, Senior Technology Professional, Cisco Systems, Inc

As the digital oilfield continues to evolve, we will examine the impact of integrating oil and gas networks through IoT, improving the integrity, efficiency, and workforce productivity while reducing cost and ensuring secure communications and operations.

HANDS-ON LABS

HOL10: PlantPax® Process Application Development

Rob Munk, Senior Commercial Engineer, Rockwell Automation

David Rapini, PlantPax Product Manager, Rockwell Automation

In this hands-on lab, you will develop a process application from scratch by starting with the PlantPax® System Application "Quick Start" templates. Once you have completed basic setup of your controller and HMI, you will continue to build out your application by adding/configuring Logix controller code and FactoryTalk® View SE graphical elements from the Rockwell Automation® Library of Process Objects.

HOL04: Defining and Sizing PlantPax® Systems – Using the PlantPax® System Estimator

Daniel Severino, PlantPax Product Manager, Rockwell Automation

Greylin Gimenez, Project Engineer, Rockwell Automation

Learn to select the appropriate PlantPax® system architecture and explore the latest system sizing and architecture rules, as tested in our characterization lab. This lab focuses on giving you hands-on experience using the PlantPax® System Estimator to design your system for optimal performance. You'll also discover new offerings in this tool for improved support of larger systems, ACP ThinManager® integration and virtualization.



HOL06: AADvance® Process Safety Implementation Lab

Stefan Mizera, Global Product Manager, AADvance/Trusted, Rockwell Automation

The AADvance® process safety solution is a truly distributed, scalable architecture comprised of a hardware controller and a software environment that allows you to apply different levels of redundancy as required by specific parts of your application. It offers a high level of flexibility from small quantity I/O to large systems, non-safety to SIL3 and fail-safe to multiple fault tolerant. This lab will show you how to select, configure and deploy a flexible architecture using the AADvance process safety solution.

HOL05: Using Modern FactoryTalk® Batch Features and Interfaces to Enhance Operating Effectiveness

Lloyd Larsen, Applications Engineer, Rockwell Automation
Mark Shepard, Application Engineer, Rockwell Automation
Bruce Kane, Global Process Technical Consultant, Rockwell Automation

Modern batch systems provide for new flexibility and improved workflows through intuitive, dynamic interfaces. Learn new ways to increase operational flexibility through the new FactoryTalk® Batch offerings. Install and configure the new server, configure new ViewSE User Controls for FactoryTalk® Batch, and set up and use the new features - including mobility.

HOL07: Controller-based Batching Using SequenceManager™

Lloyd Larsen, Applications Engineer, Rockwell Automation
Mark Shepard, Application Engineer, Rockwell Automation
Pinghua Zhao, Global Process Technical Consultant, Rockwell Automation

Discover SequenceManager™, a modern batch solution that provides batch sequencing in the Logix family of controllers, adding power capability closer to the process, and opening new possibilities for skids, off network systems, and single unit control. In this session, you will configure and run SequenceManager™ in Logix Designer, ViewSE, and deploy batch reports.

HOL08: Truly Distributed Batch: Deploying Controller-Based Sequences with FactoryTalk® Batch

Lloyd Larsen, Applications Engineer, Rockwell Automation
Mark Shepard, Application Engineer, Rockwell Automation
Pinghua Zhao, Global Process Technical Consultant, Rockwell Automation
Bruce Kane, Global Process Technical Consultant, Rockwell Automation

Modern batch systems must provide for flexible architecture and distribution of batch execution. SequenceManager™ opens new possibilities for skids, off network systems and single unit control. Learn how to integrate these systems to a plant-wide batch system by utilizing SequenceManager™ sequences in the controller with the all new FactoryTalk® Batch 13.

HOL09: Model Predictive Control Within the Logix Controller

Michael Tay, Product Manager-Pavilion, Rockwell Automation
NEW CLASS! Model Predictive Control (MPC) increases capacity, quality and performance. Learn to use new Process Library MPC Accelerator tools to make deployment easier and quicker. In addition, MPC in the chassis is simple and robust. Learn how to develop advanced control or execute strategic project steps.

HOL02: ThinManager® Experience the Platform's Power and Simplicity

Doug Coulter, Product Manager, ThinManager, Rockwell Automation
Travis Seagert, Software Engineer, Rockwell Automation
Chris Mason, Product Manager, Rockwell Automation

This lab introduces the primary building blocks of the ThinManager® platform while demonstrating its ease of use and flexible content delivery options within a PlantPax® environment. This session includes hands on training with the latest Rockwell Automation® industrial grade box thin client, the VersaView® 5200.

HOL01: Basic Stratix® Switch and EtherNet/IP Features in Converged Plantwide Ethernet (CPwE) Architectures

Arkady Nabutovsky, Senior Commercial Engineer, Rockwell Automation

This hands-on lab will cover a variety of techniques and best practices using EtherNet/IP, including Stratix® 5700 and Stratix® 8000 hardware familiarization. It will demonstrate how to configure Stratix® switches using the Device Manager, the AOP and controller tags in Studio 5000®; and how to use the Stratix® FactoryTalk® View faceplates for diagnostics. It will also show configuration and diagnostics of a Device Level Ring (DLR) Topology.

HOL03: Introduction to Network Security Lab

Dan Lahr, Senior Commercial Engineer, Rockwell Automation

A resilient industrial network security system is essential to ensure that data is protected and that proper access is only given to the right people at the right time. In this session, you will learn the basic security functions you can use to start optimizing security in your plant network. See how security features in managed switches, like port security, access control lists, and port thresholds, as well as specific capabilities of the Stratix® 5950 Security appliance with deep packet inspection, can help mitigate potential security risks.

CUSTOMER APPLICATION CASE STUDIES

CS01: Greenfield Chemical Plant Implements PlantPax® DCS, Promotes Situational Awareness with ISA101 HMI Graphics

Michael A Lennon, Vice President, Applied Control Engineering
David N. Erby, P.E. Vice President Applied Control Engineering, Inc. (ACE)

Discover the process Applied Control Engineering used to deliver standard graphic and controller code using the PlantPax® DCS and AADvance SIS for an ethylene oxide facility. You'll learn how the plant benefitted from alarm rationalization with Encompass™ partner exida, as well as project lifecycle management, and how Rockwell Automation® configuration tools helped save time. The HMI displays have currently been used to train operators before the plant goes live.

CS02: Insight into a 1980's Vintage High Explosives Plant Control System Upgrade

Craig Hattersley, Senior Systems Engineer, SAGE Automation

This session explores how a leading explosives facility undertook a complete control system migration project. Learn how PlantPax® DCS and AADvance® safety system allowed for an open, integrated platform and provided pre-developed and proven process objects library while adhering to current compliance standards.

CS03: El Paso WWTP Upgrades Legacy System to PlantPax® Distributed Control System

Trinidad Cruz, Regional Account Manager, Prime Controls
Bill Bivens, Vice President- Sales, Prime Controls

When two wastewater treatment plants in El Paso, TX needed upgrading, the PlantPax® DCS served as the cornerstone. Discover how the collaborative effort between Rockwell Automation®, EPWU, and Prime Controls resulted in two separate legacy control systems replaced by one single, modern DCS platform across both plants.

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CS04: Migrating from Bailey® INFI90 to PlantPax® using a Multi-Phase Approach

*Joseph Driver, Corporate Application Engineer, Champion Technology Services, Inc.
William Sulzer, Senior Automation Engineer, Champion Technology Services*

Looking to capitalize on extensive in-house Allen-Bradley® knowledge and reduce training time, a specialty chemical producer selected Champion Technology Services to oversee the migration of their Bailey INFI90 to the PlantPax® DCS. Phase 1 of the multi-phase migration laid the foundation by introducing FactoryTalk® View SE graphics and redundant HMI servers, including a live cutover with no downtime and no shutdowns, resulting in improved product quality and operator experience. The planned Phase 2 will complete the migration and is scheduled to occur during the customer’s scheduled downtime before fully migrating the system to PlantPax®.

CS05: Phillips 66 Upgrades Automation System and Improves Uptime and Change Management with PlantPax® Platform

*Asa Ange, Champion Technology Services, Inc.
Daniel Kopcso, Automation Engineer, Champion Technology Services*

The Phillips 66 Pasadena Terminal is capable of loading 65,000 barrels per day via truck through a tank farm with approximately 3.2 million barrels of storage capacity. The existing pipeline/terminal and truck loading control system consisted of 24 SLC-500s, one PLC-5®, and seven Wonderware standalone HMIs. Phillips 66 worked with Champion Technology Services to deliver a solution that would drive consistency across the facility and reduce the number of controllers. The implemented PlantPax® solution consolidated all logic execution into two ControlLogix®, the backward compatibility of the platform minimized capital investment as existing I/O remained intact, and substantial messaging was eliminated. The result is a single application that increased uptime and improved system maintainability.

CS06: From Development to Start up in a Vegetable Oil Refinery Conversion from a PLC/HMI Application to a PlantPax® DCS

Camilo Guevara, Automation Manager, Desmet Ballestra North America

Desmet Ballestra North America, a worldwide organization, needed to standardize its automation platform. Having multiple local in-house libraries made the maintenance and integration of control applications a challenge. The company chose the PlantPax® DCS because it not only saved an estimated 25% of development time, but it also kept their costs under budget. The PlantPax® platform, which meets ISA 101 standards, also provides a standard for future upgrades.

CS07: DuPont Migration and Batch Automation Using Rockwell Automation® FactoryTalk® Batch, eProcedure®, & Material Manager

Nancy H. Givens, Automation & Process Control Engineering Consultant, DuPont

The DuPont Electronics and Communications site at Hayward, CA is a producer of electronics cleaning solutions. Its batch process has historically operated as a primarily manual process with minimal automation. To lower batch cycle time and increase efficiencies the site upgraded from older PLC-5® controllers and implemented a modern batch automation solution including the use of the FactoryTalk® Batch, eProcedure®, and Material Manager.

CS08: Frames Flow Control & Safeguarding Creates Fully Autonomous Wellsite Skids Thanks to PlantPax® DCS

*Thomas de Wolf, Product Manager Flow Control & Safeguarding, Frames
Tim Lauret, General Manager, Frames*

As an integrator of Rockwell Automation®, and specifically the AADvance® system, Frames has developed a complete safeguarding and control system for nine gas wells of the Nawara field in Tunisia combined with a central PlantPax® DCS. The solar powered systems are used on the completely integrated wellsite skids of Frames that are installed at remote locations with minimal operator interaction. For the BPCS (process control) elements of the skids, Frames deployed a Rockwell Automation® solution – comprising multiple ATEX-certified products and components – and implemented a scalable PlantPax® DCS with I/O modules. The SIS of the skids is controlled by an AADvance® system that provides an effective solution, whether the I/O count is small or large. A key feature of the installed system is its versatility concerning size, safety and availability.

CS09: Integrating Rockwell Automation® into the New Era of Digital Mining

*Josh Lilley, Senior Electrical Engineer, Hatch LTD
Samandeep Dhaliwal, Systems and Process Control Engineer, Hatch LTD*

Mining companies are in a constant quest to reduce operating costs for existing mines and find a means of more efficiently utilizing resources to access deeper ore bodies. Hatch is working with a mining client to design the expansion of the existing installed Rockwell Automation® process control system to incorporate the next generation of Rockwell Automation® solutions. The implementation will leverage the latest technologies and help reduce production costs and improve operating efficiencies. The new mine expansion will use complete wireless coverage and EtherNet/IP for all communications, and will integrate all process control information into an overall mine management system.

CS10: Simultaneous Upgrade of Tissue Machine Control System & Drives Plus Addition of Machine Safety System

James Serra, Electrical Technical Leader, Kimberly-Clark Corp

This case study will discuss the methods used and challenges overcome to accomplish three concurrent projects on a tissue machine during one shutdown. The GE DC drive system and the Experion control system were replaced, plus a new machine safety system was installed to take advantage of a common Rockwell Automation® platform.

CS11: Large Project Execution - A Better Way

*Lee Swindler, Program Manager, MAVERICK Technologies,
A Rockwell Automation Company*

There are many challenges to effectively executing automation scope as overall project size grows to \$100 million and beyond. Interfaces between various stakeholders and proper distribution of work become critical to define and manage properly. The traditional model of large project execution has inherent weaknesses that can be mitigated by an alternate approach. Learn about solutions to common problems with executing large project automation scope that have proven to be effective.

CS12: Feedstock Producer Achieves Cost-Effective Batching and Reporting with SequenceManager™ Software

Mike Triassi, Business Development Manager, Optimization

Grober needed a simple way to run four, new, independent batch processes, which operate continuously unless manually stopped to adjust formulations. Learn how the SequenceManager™ solution allows a sole operator to run single unit batch subsystems with full-feature Rockwell Automation® batch reports. The solution eliminates the complexity of recipes or a batch server, but allows for an easy upgrade to FactoryTalk® Batch when needed.

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CS13: Power Plant Leverages Virtualization to Modernize Control Room and Maximize Availability

*Richard Johnson, Electrical Engineer, Michigan State University
Dave Smrdel, Manager, Power and Energy, Rovisys*

The Michigan State University (MSU) campus power plant faced a challenge to upgrade the operator stations in the control room to reduce risk associated with running early 1990's vintage operator stations. MSU selected RoviSys to help them modernize their graphics, design a robust network architecture and develop redundant communication interfaces to the existing legacy ABB control systems. Learn how the implementation of an Industrial Data Center (IDC) virtualized architecture, IT-based remote monitoring, and high-performance HMI operator nodes all came together to provide MSU the long-term solution they required.

CS14: A Chemical Plant Uses PlantPAX® DCS to Automatically Create and Execute Unique R&D Batches

Victor Bertorelli, Senior Control Systems Developer, Matrix Technologies, Inc.

OxyVinyls, a leading North American producer of polyvinyl chloride resins, replaced an obsolete DCS in one of their research and development facilities. The obsolete DCS was upgraded to the PlantPAX® system utilizing FactoryTalk® Batch and integrated to its Manufacturing Operation Management System to achieve maximum flexibility and reduce its new product development time to market gap.

CS15: How Process Optimization can Improve Throughput, Quality, Operations and Justify Control System Modernization

Danny Branson, Project Engineer, Kraft Heinz Company

Discover how Kraft Heinz optimized their french fry production line and how the value of this solution allowed for additional investments. Learn about the many benefits including significant reduction of break-in-line flow events, increased raw and finished product yield, and reduced variation and scrap.

CS16: Trident Automation Revamped CertainTeed's Shuttered Plant with New Modern DCS Using Innovative Design Concepts

*Yogesh Maheshwari, Engineering Manager, Trident Automation
Jerry Wenzel, Principal, Chief Knowledge Officer, Trident Automation*

A new modern DCS, PlantPAX® system, was delivered bringing CertainTeed's plant in Meridian, Mississippi back from a shuttered state to fully operational state. Trident's use of its engineering best practices along with developed PlantPAX® system elements were essential for a successful deployment. This gave the plant the ability to troubleshoot, modify and monitor the process equipment on a familiar hardware platform from the start.

CS17: LBC Tank Terminals Implements PlantPAX® DCS to Sustain Profitability

*Kris De Roeck, Project Manager, AGIDENS Process Automation
Ingrid Haleydt, Group IT Manager, LBC Tank Terminals*

LBC Tank Terminals identified and implemented a PlantPAX® DCS, including cross-terminal IT and OT partnerships (Cisco, Microsoft, Endress+Hauser), supporting both short and long-term business goals such as high availability, integrated safety, easy scalability, digitalization, vertical or lateral integration, and significant OPEX gains. Agidens integrated the innovative PlantPAX® solution to make it possible for LBC to remove obsolete control architectures and gain extensive system ownership and information security.

CS18: Total Cost of Ownership and Platform Functionality Lead Alnylam Pharmaceutical to Select PlantPAX® DCS for New Greenfield Biotech Facility

Aaron Conant, Associate Director of Automation Engineering, Alnylam Pharmaceuticals, Inc.

Alnylam Pharmaceutical completed a thorough analysis of automation platforms for use as the single, validated distributed control system (DCS) for its greenfield facility construction in Norton, MA. Multiple industry leading platforms were evaluated such as Delta-V and Siemens, but Rockwell Automation® was selected based on functionality, innovative technology, scalability and total cost of ownership including ongoing operational support. PlantPAX® DCS offered a complete solution to include batch and continuous control needed for process and utilities equipment, and other requirements such as Building Automation System (BAS) and Environmental Monitoring System (EMS). Key competencies such as five-year cost analysis, availability of local resources for project and trouble calls, and integration with company IT standards were evaluated in tandem with standard automation platform functionality.

CS19: A Chemical Facility Fully Migrates to PlantPAX® DCS Avoiding Risk and Reliability Issues

*John Glenski, President, Automation Plus
Dennis Romak, Vice President of Strategy & Market Development, Automation Plus*

Dover Chemical completed a full migration from Foxboro to PlantPAX® DCS. Automation Plus, A Plus Group Company executed the engineering and programming delivering high value solutions. Discover the value of modernization with lower batch cycle times, electronic batch records, and increased product consistency.

CS20: Best Practices on Intelligent Incident Response in Production Environments

*Alan Raveling, Manufacturing IT Security Lead, Interstates Control Systems, Inc.
Brandon Bohle, Manufacturing IT Security Analyst, Interstates Control Systems, Inc.*

Responding to incidents quickly, intelligently, and with the right people, processes, and technology create the difference between an interrupted morning or calendar-clearing event, like the 'WannaCry' cyberattack was for hundreds of thousands of victims. Discover the differences between incident responses from the production level to the business level and how increased clarity on responsibilities can help equal faster and more thorough resolution.

CS21: Colorado State University Brews Up Modern DCS for Students

*Dan Malyszko, Director of Operations, Malisko Engineering
Jeffrey Callaway, Associate Director, Colorado State University*

Colorado State University has brought together some of the brewing industry's finest brewers and suppliers to build two breweries on campus as critical elements of their unique Fermentation Science and Technology degree program. Learn how Malisko Engineering has deployed a state-of-the-art PlantPAX® distributed control system at CSU to meet the academic needs of the program and fulfill industry outreach, research and extension.

CS22: From a Manual to Fully Automated Pharmaceutical Facility: A Tale of Two Systems with One Integrated Solution

Zubin Najmi, Principal Engineer, Grifols Diagnostic Solutions, Inc.

For Grifols Diagnostic Solutions, Inc. transitioning from manual processes to a new fully automated centralized GMP facility was a huge undertaking. This session explores the goals and challenges and how a common control system met the needs for both process and building automation in a validated life sciences industry.

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CS23: Integration and Implementation of PlantPax System for Gas Refining in the Coal Chemical Industry

Zhang Weihua, General Manager, Chemical Business – Baosight

In July 2015, Baosteel Chemical Group implemented a large new gas refinery plant for their steel production plant, Baosteel Zhanjiang. The company used the PlantPax® system as their new DCS platform because of the EtherNet/IP network and Logix uniform platform which can provide seamless integration for process, safety and information. It also leveraged Stratix® switch also provided transparent network status to ensure a stable system. The flexibility of the Rockwell Automation® delivery model enabled the system integrator to expand their configuration and optimization scope against traditional DCSs. In the end, the project was delivered on time, has experienced zero downtime since the completion date and has reached full production capacities.

CS25: New Power Management System at Braskem Idesa Facility Minimizes Energy Costs

Stephany Villareal Moreno, Systems Engineer

Looking for the most efficient production of electricity from gas turbines at its new ethylene facility in Veracruz Mexico, Braskem Idesa contracted with Technip Italy to implement a new power management system (PMS). Working in conjunction with the load sharing and energy monitoring systems it was built on a redundant ControlLogix® architecture and tasked with keeping the turbines working at the lowest speed possible while still satisfying the facility's energy demand. Since implementation, the system has proven to be extremely effective, meeting the load demands and minimizing maintenance and gas consumption costs.

ASK THE EXPERTS

SCALABLE ANYLYTICS

Moderator: Mike Orona, Marketing Programs Specialist, Rockwell Automation

Analytics takes data from across a Connected Enterprise and makes information available to stakeholders as actively and simply as possible. Join this session to leverage a panel of experts who can help you discover an analytics solution to solve your current issues. Discover why you should be investigating the growing analytics product portfolio from Rockwell Automation®. *This session features a panel of subject matter experts ready to answer audience questions and discuss current topics and trends.*

Panelists:

- Michael Tay, Rockwell Automation*
- Douglas Weber, Rockwell Automation*
- Pradeep Kaushik, Rockwell Automation*

NETWORKS/SECURITY - IT AND OT INTEGRATION

Moderator: JP Wright, Business Development Manager, Rockwell Automation

Control system security. SCADA security. PCN security. Industrial network security. The prevention of intentional or unintentional interference with the operation of industrial automation and control systems is paramount. As commercial-off-the-shelf technology increases, enterprise integration expands and demand for remote access rises, you must be ever vigilant of cybersecurity. Get your network security questions answered. *This session features a panel of subject matter experts ready to answer audience questions and discuss current topics and trends.*

Panelists:

- Alex Nicoll, Industrial Security Architect, Rockwell Automation*
- Fabiano Fernandes, PlantPax Architect, Rockwell Automation*
- Kevin Tambascio, Manager, Cybersecurity, Rockwell Automation*
- Greg Bixler, Electrical Engineering Technical Leader, Kimberly Clark*
- Larry Grate, Director of Technology, Premier Systems*
- Umair Masud, Manager, Consulting, Rockwell Automation*
- Josh Kass, Product Manager, Networks, Rockwell Automation*

PLANTPAX SYSTEM DESIGN AND DEPLOYMENT

Moderator: Dave Rapini, PlantPax Product Manager, Rockwell Automation

Do you want to achieve superior results with the PlantPax® System? This session allows you to leverage the knowledge of system experts who can help ensure that the PlantPax® system is delivered efficiently and designed for optimal performance. Ask us about the latest system capabilities available to assist in your efforts. *This session features a panel of subject matter experts ready to answer audience questions and discuss current topics and trends.*

Panelists:

- Johann Kotze, Rockwell Automation*
- Justin Bolek, Rockwell Automation*
- Kevin Dewitt, Rockwell Automation*

PROCESS SAFETY/CRITICAL CONTROL

Moderator: Steve Del Rio, Global Business Manager, Rockwell Automation

Process Safety Management is the development of systems and procedures to prevent unwanted incidences that may affect people, assets and the environment. The tools, techniques, standards and programs used in process safety management are numerous. Whether you have questions regarding Safety Lifecycle, SIL ratings, Safety Instrumented Functions, or other concerns, this is your opportunity to ask the experts about compliance to the latest Global Safety Standards, best practices and methods that can best help you minimize risk. *This session features a panel of subject matter experts ready to answer audience questions and discuss current topics and trends.*

Panelists:

- Steve Gandy, VP Global Business Development, exida Consulting LLC*
- Roland Joseph, Technical Section Lead, Procter & Gamble*
- Pete Skipp, Manager – Process Safety, Rockwell Automation*
- Kirk Fontenot, TÜV FSEng, Process Safety Business Development Manager, Rockwell Automation*
- Stefan Mizera, Global Product Manager - AADvance/Trusted, Rockwell Automation*

INTELLIGENT MOTOR CONTROL/ PLANTPAX INTEGRATION

Moderator: Kris Dornan, Process Business, Rockwell Automation

Easy access to critical information from your intelligent motor controls can improve operations, maintenance, and plant efficiency. Now this access is extended to the switchgear and E-Houses of your facility through IEC 61850. This session allows you to leverage the knowledge of experts in motor control and PlantPax® Systems to provide best practices and methods for implementing and leveraging a high level of integration. *This session features a panel of subject matter experts ready to answer audience questions and discuss current topics and trends.*

Panelists:

- Jerry Steenhoek, Chief Technologist, Interstates Control Systems, Inc*
- David Mazur, Rockwell Automation*
- Jon Davis, Rockwell Automation*

Rockwell Automation Mobile App

Download the Rockwell Automation Events App from your mobile store. Participate in our **Voice of Customer** surveys located in the **mobile app** for a chance to win these great prizes.



Keep Learning All Year Long

If you love the trending topics, technical content and customer success stories you've heard at PSUG, sign up to receive PlantPAX: Process Talk.

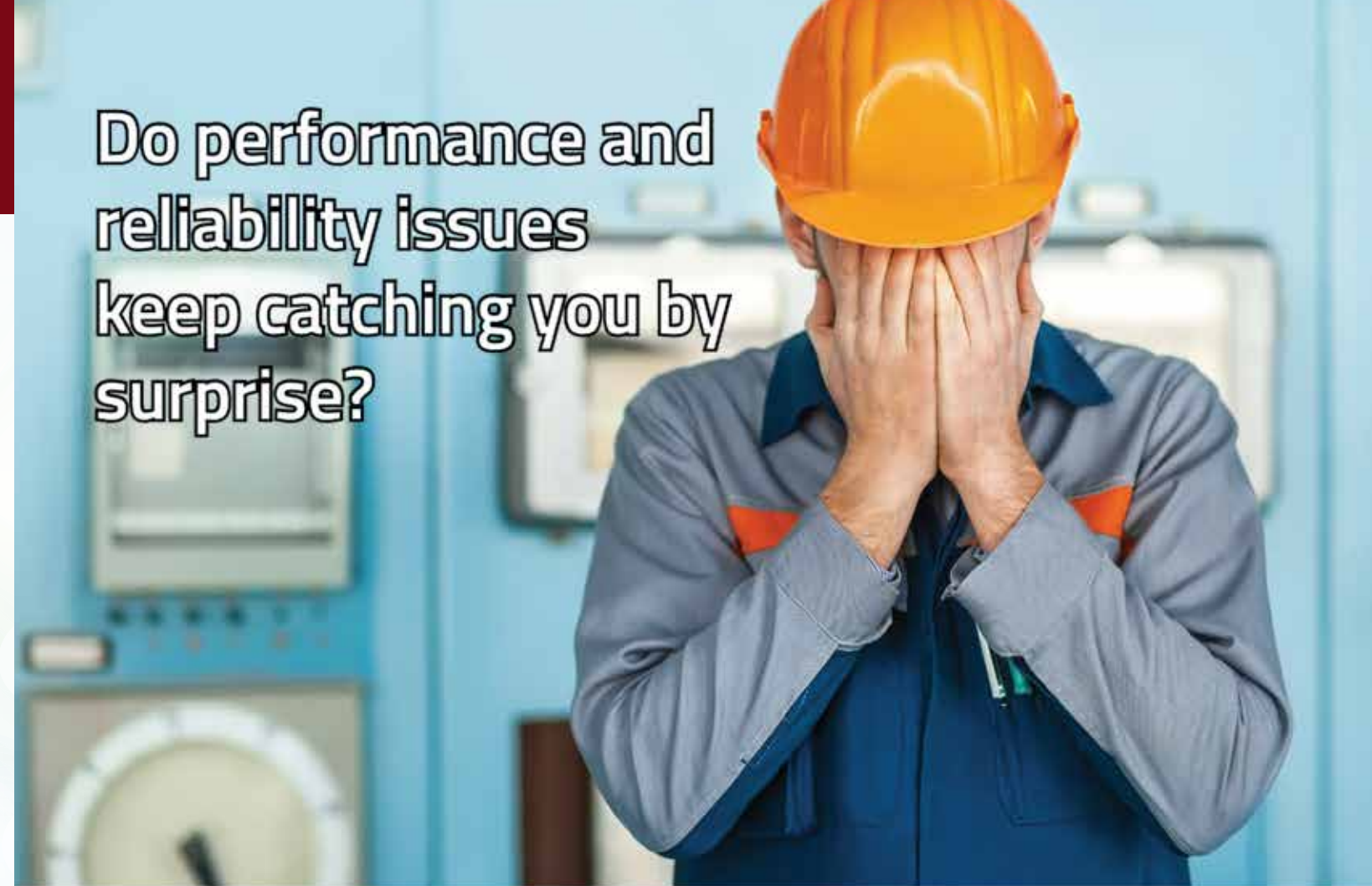
Through this quarterly e-newsletter, Rockwell Automation delivers the latest technical information, industry news, and best practices right to your email in-box. Each information-packed issue contains thought leadership articles on industry trends and developments, previews of new technologies and products from Rockwell Automation and its partners, customer success stories, training opportunities and global event information.

Don't miss the next edition! **Subscribe to PlantPAX: Process Talk now.**



NOTES:

Do performance and reliability issues keep catching you by surprise?



PlantESP™ Loop Performance Monitoring

Plant-wide diagnostic and optimization technology

Hidden in your process data are the details of impending issues that will eventually affect production. They will impact quality and throughput as well as energy consumption and even uptime. However, with the right tools you can proactively uncover performance issues and drive production to new levels of profitability.

PlantESP monitors control loop performance on a plant-wide basis and proactively identifies issues that affect control and reliability. It equips your staff with early detection, verifiable analysis, and actionable insights.

Put an end to the surprises and get competitive. Get PlantESP.



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+18608722920
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Visit us during Automation Fair at Booth #2013!

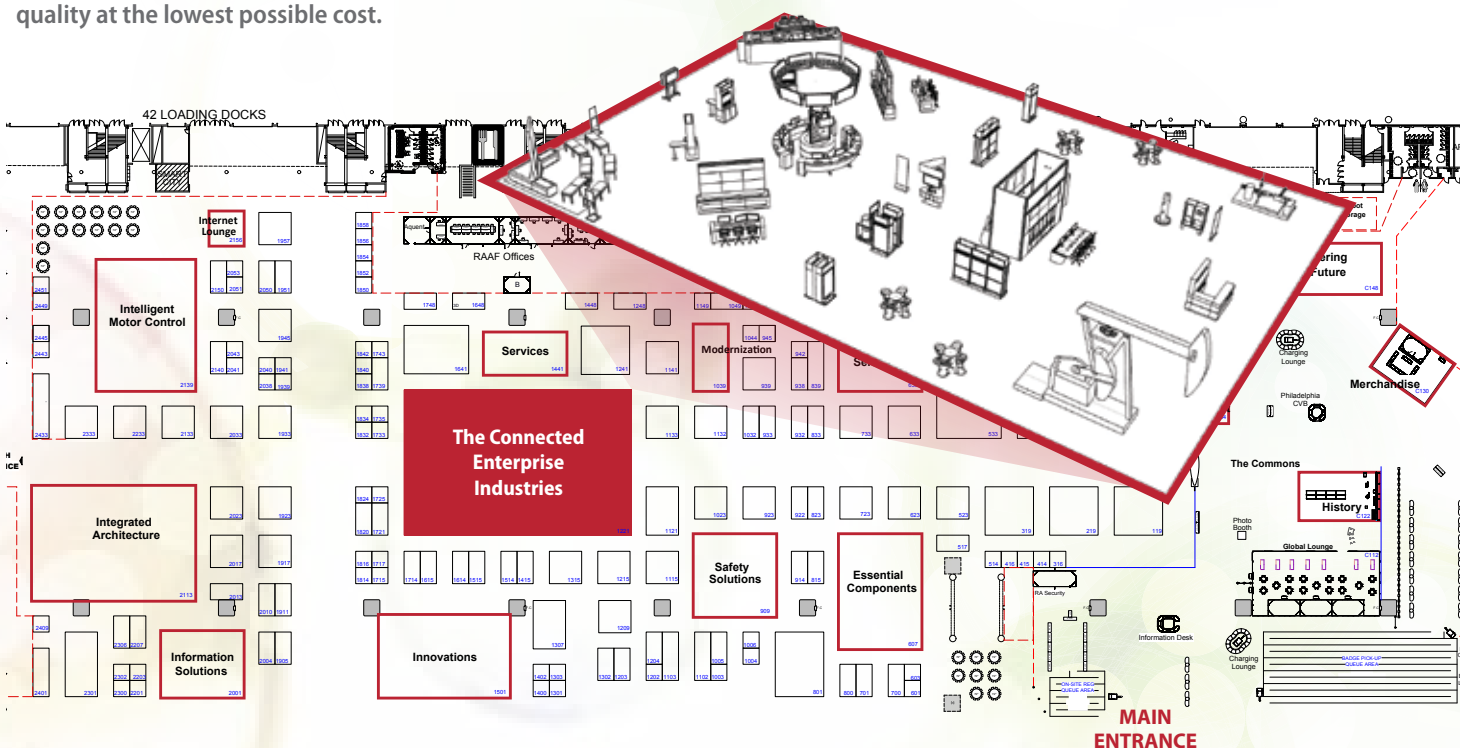


Extend Your Process Experience at the Automation Fair® Event





VISIT BOOTH 1221

The Connected Enterprise Industries Pavilion

Digital transformation is creating major opportunity for industrial producers to make the most of their operations. Through connectivity and digitized processes, they can gain access to actionable information and improve almost any aspect of enterprise performance. For example, in consumer-focused industries, this could mean more effectively predicting customer demand and making adjustments to satisfy that demand. In heavy process industries, it could mean meeting demand requirements by delivering the highest possible quality at the lowest possible cost.



In the Connected Enterprise Industry Pavilion, Rockwell Automation® will showcase new technology developments and discuss how its industry expertise, Information and Process Solutions and services are helping companies reap the benefits of digital transformation. Specific examples will show how:

-  **Oil and gas** producers are transitioning to a digital oilfield
-  **Chemical** producers are improving process safety while enhancing productivity and power control
-  **Food and beverage** companies are integrating smart machines for fully connected, plant-wide operations
-  **New technologies** are redefining how companies monitor and manage their operations

Visit the pavilion to see how digital transformation makes these optimization opportunities possible today by unlocking value that has long been hidden in most operations. You can also see all the latest innovations from Information and Process Solutions that converge IT and OT to deliver decision-making intelligence at every level of your enterprise. Join us in our theater to learn best practices and hear from thought leaders to ensure you are making the most of your digital transformation.

Industry Forums



A Culture of Inclusion & Diversity in Manufacturing
Nov 16 | 1:00 - 3:00 pm



Chemical & Specialty Chemical
Nov 15 | 1:00 - 3:00 pm



Food & Beverage
Nov 15 | 9:00 - 11:00 am



Oil & Gas
Nov 15 | 9:00 - 11:00 am
Nov 16 | 9:00 - 11:00 am



Power & Energy
Nov 15 | 1:00 - 3:00 pm



Pulp & Paper
Nov 16 | 9:00 - 11:00 am



Water/Waste Water
Nov 15 | 9:00 - 11:00 am



Engineering Procurement & Construction (EPC)
Nov 15 | 1:00 - 5:00 pm



Machine & Equipment Builders (OEMs)
Nov 16 | 9:00 - 11:00 am

Process Solutions Sessions

Don't forget to check out our other Process Solutions sessions at the Automation Fair® event.



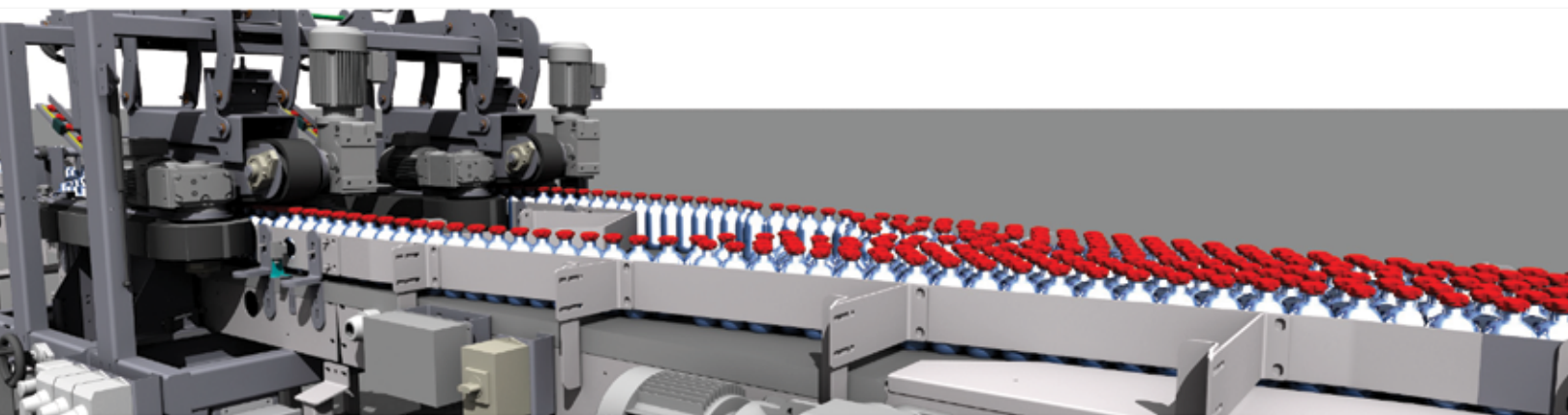
- Technical Sessions
- Hands-on Labs
- Exhibitors

Access more on our **Mobile App**





EMULATE3D



CONTROLS TESTING FOR AUTOMATED SYSTEMS AND MACHINE BUILDERS

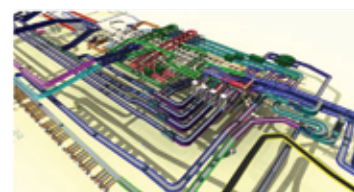
Emulate3D Controls Testing software enables you to test out and debug your automated system or machine controls before the equipment is built, by automatically connecting the PLC to your Emulate3D or CAD model. Significantly reduce your time to market and cut your development costs by running logic tests and carrying out design changes on your system's digital twin in a safe and repeatable virtual environment, before building the real thing.

View, demonstrate, and interactively control your solutions within a virtual reality (VR) environment for maximum impact. Invite your clients to join the VR experience by logging in to your model remotely, so you can show and discuss the latest project changes. With Emulate3D technology, focused meetings can be spontaneous and more frequent, less costly, and with practically no carbon footprint.

Emulate3D combines CAD data, control element properties, and PLC IO connections within your CAD environment to generate your virtual machine with minimal effort. Get your solutions running and ready to test faster with Emulate3D.

The Main Benefits of using Emulate3D:

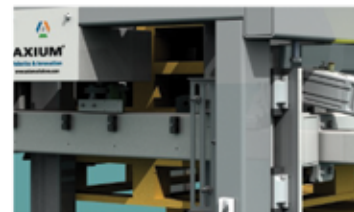
- Straightforward CAD system model build using the Emulate3D Add-in
- Reduced time to market with rapid virtual development and testing
- Robust and fully tested controls and reduced costs with fewer prototypes
- Standard naming conventions enable automatic IO connection to all controls
- Reduce the risk associated with all automation investments



Model supplied by AutoLogic Systems



Model supplied by ALFI Technologies



CAD supplied by Symbolic



See more - search for Emulate3D

EMULATION - INTERACTIVE VIRTUAL REALITY - AUGMENTED AND MIXED REALITY
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Rockwell Automation
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