Process Solutions User Group (PSUG) 2015
November 16th & 17th

The PSUG event addresses the challenges that impact productivity, time to market, energy consumption and total cost of ownership within the process industries. Join your peers at this industry leading event for thought provoking keynotes, insightful technical sessions and rewarding hands-on labs.

ENLIGHTENED technical sessions deliver information on the latest modern process automation technologies and techniques

INSPIRED customer-delivered best practices, innovative approaches, outstanding ROI and important successes achieved through Rockwell Automation solutions.

UNSURPASSED peer-to-peer networking activities provide an opportunity to learn from other industry-leading professionals.

Total cost for this **two-day event is $499.00**
Visit www.psug.rockwellautomation.com for more information

Automation Fair 2015
November 18th & 19th

The Automation Fair event is focused on improving business profitability. Attend industry forums, hands-on labs, technical sessions, workshops, and demonstrations.

DISCOVER how to improve productivity and efficiency throughout the lifecycle of your automation investments.

LEARN how flexible, scalable automation solutions can lower costs and improve overall performance.

EXPERIENCE how sustainable production practices can increase your competitiveness and help you better manage energy and materials costs.

Visit www.automationfair.com for more information

LISTEN.
THINK.
SOLVE.®

Rockwell Automation

Rockwell Automation will host the Process Solutions User Group (PSUG), its signature customer event for the process industries on November 16-17, 2015 at McCormick Place West in Chicago, IL. By attending, you'll have the opportunity to attend dozens of technical sessions and hands-on labs which offer professional development hours.   In addition, Customer Application sessions and Ask the Expert sessions will give you an opportunity to learn about best practices employed by your peers and to ask pertinent questions of industry experts. Overall, taking part in this event is going to enhance your professional knowledge and increase your value to your company.

Here's the benefits that you will gain from your attendance at the conference

• Two days to network with peers from diverse process industries to gain a better perspective on best practices that you can leverage.

• An opportunity to provide direct feedback to Rockwell Automation on future development requirements that will enhance your company's investment in process control solutions.

• The ability to meet one-on-one with Rockwell Automation subject matter experts to discuss solutions to your specific challenges.

• Direct participation in training courses to earn Professional Development Hours, saving you time and money on separate training.

Come join us! Registration can be found at:
http://psug.rockwellautomation.com

TECHNICAL SESSIONS

TS01- Introduction to PlantPAx
Tim Schmidt, Global Process Marketing Lead, Rockwell Automation
Introduction to the PlantPAx system for those looking to gain a basic understanding. After attending this session, you will be able to define the PlantPAx system and understand how it provides all the capabilities you expect from a modern DCS.

TS02 - Linking Loop Analytics and Optimization to Your Plant and You
Robert Rice, Vice President - Engineering, Control Station, Inc.
Daniel Corby, Plant Engineering, McGard LLC.
This presentation utilizes industry case studies to showcase the value of loop analytics and PlantESP, which includes engineering and financial metrics used as cost justification.

TS03 - Applications for PlantPAx MPC
Michael Tay, Product Manager - Pavilion, Rockwell Automation
Model Predictive Control (MPC) will be available in a Logix environment for the first time next year. This significant expansion of the current APC block functionality makes advanced control easier and more powerful than ever. What type of process control problems is PlantPAx MPC designed to solve? A broad range of known MPC applications will be presented along with how MPC improves control results and plant productivity.

TS04 - Exploring the Functionality of the Rockwell Automation Library of Process Objects
Dale Reed, Senior System Project Engineer, Rockwell Automation
The Rockwell Automation Library of Process Objects lets you quickly develop process solutions with rich functionality and known performance. Objects in the library and their functions within a typical process control system are presented. Common library features such as modes, alarms and features for operations, maintenance and engineering personnel are explained. New features for the 3.5 library release are highlighted. Walk away knowing how to more effectively develop, operate and maintain process systems.

TS05 - Explosion Protection Methods and Solutions: Comparing Intrinsic Safety vs. Explosion Proof
Robert Schosker, Product Manager, Pepprl + Fuchs
Shannon Foos, Product Manager - PlantPAx, Rockwell Automation
Intrinsic safety is a commonly used explosion protection method. This presentation will illustrate some of the advantages of intrisic safety barriers over other explosion protection methods used in process automation.

TS06 - Cisco Solutions for the Converged Plant-wide Ethernet Architecture

Paul Taylor, Global Alliance Manager, CISCO
Gregory Wilcox, Global Business Development Manager, Rockwell Automation

Cisco® products and solutions enable technical and cultural convergence between information technology (IT) and industrial automation technology (operational technology - OT). This discussion reviews the Cisco® solutions within the Cisco and Rockwell Automation® CPwE (converged plant-wide Ethernet) architectures, including the Catalyst® family of switches and Adaptive Security Appliances (ASA) firewalls, capabilities, selection and support. A prior understanding of general Ethernet concepts is recommended.

TS07 - Securing Industrial Networks for Global Critical Infrastructure Protection

Tony Baker, Security Leader, Rockwell Automation

Protecting critical infrastructure networks and industrial assets is critical to the preservation of global economic stability. This session will explore case studies involving the latest industrial control system vulnerabilities impacting global critical infrastructures and will describe applicable countermeasures to help detect, respond and eradicate these threats. Anatomies of networks, threats, vulnerabilities will be described in technical, practical details to ensure relational value. Subject sectors include Oil & Gas, Water/ Wastewater, Energy, Dams, and Chemical. Applicable, government compliance framework requirements and industry best practices and standards will be integrated into countermeasure operational activities. Learn about these specific threats and the risk and mitigation techniques to manage them.

TS08 - Advanced Integrated Architecture Mobility Using ThinManager Relevance

Mike Smoltz, Vice President-Business Development, ACP Company

This session demonstrates how to deploy line of sight mobile PlantPAx applications, while incorporating Active Directory using ThinManager Relevance.

TS09 - Trends in Safety Instrumented Systems

Paul Gruhm, P.E., Industry Technical Consultant, Rockwell Automation
Michael Vernak, Global Process Marketing Lead, Rockwell Automation

Safety programmable logic controllers (specialized PLCs designed from the ground up specifically for critical safety applications) have been available since the early 1980s. Changes in technology have led to a variety of recent developments. Many vendors have released new systems which are a considerable departure from past systems. This presentation summarizes some of the latest trends in safety instrumented system designs, such as smaller, scalable, distributed systems; flexible redundancy; integrated control and safety from one vendor; safety field busses; field device diagnostics and certifications; certifications for personnel; partial stroking of valves; and SIL ratings for fire & gas systems.

TS10 - Alarm Management: Monitoring, Assessment and Bad Actor Resolution

Todd Stauffer, Director - Alarm Management Services, Exida, Inc.
Tony Barrancotta, PlantPAx Engineering Lead, Rockwell Automation

In this session we will review the Alarm Management entry points defined by ANSI/ISA 18.2 Standard: Management of Alarm Systems for the Process Industries. We will then focus our attention specifically on the monitoring & assessment entry point and discuss guidelines and methods for dealing with nuisance or "bad actor" alarms. Finally, features of the Rockwell Automation PlantPAx system which support implementation of these techniques will be examined.

TS11 - Improving Plant Operations Through Better HMI Graphics

Abigail Plumb-Larrick, UX Leader, Rockwell Automation

Plant operators are required to make decisions every day that can directly influence profitability, either by the normal running of the plant or by reacting swiftly to the unusual – protecting material, assets and personnel. These decisions need to be based on clear unambiguous information from your visualization systems. This session covers producing graphics that deliver meaningful and detailed information allowing the operators to run the plant at the most efficient level. We'll examine what graphic designs work best at keeping your plant operatives informed of the plant status at a glance to enable them to make correct decisions.

TS12 - Migrating Your Legacy DCS Systems
Michael Vernak, Global Process Marketing Lead,
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 to the PlantPAx distributed control system. You'll learn about the multitude of tools – scanners, cables, code conversion, wiring harnesses, etc. – available from Rockwell Automation that can help you migrate your system at a pace that's comfortable for you.

TS13 - Defining and Sizing PlantPAx Systems
Fabiano Fernandes, System Architecture -
PlantPAx, Rockwell Automation
Jason Wright, Business Manager - PlantPAx, Rockwell Automation

Learn how to select the appropriate PlantPax system based on your project requirements. Review the latest system and architecture rules, as tested in our characterization lab. We'll also examine the new capabilities offered in the PlantPAx System Estimator.

TS14 - Building Your Centralized Training Platform for a Complex Process
Pierce Wu, Simulation Project Engineer, Mynah Technologies
John Steckler, Process Automation Manager, ADM

This session will introduce how automation, operations, and plant managers can build a centralized process training platform across multiple remote locations using Mimic real-time simulation to bring life cycle value and convenience. The session will be based on a real steam turbine simulation project for an ADM cogeneration plant.

TS15 - FactoryTalk Historian: Configuring Redundancy and High Availability
Rick Stephan, Sr. Commercial Engineer -
Information Software, Rockwell Automation

See demonstrations showing how to configure redundancy for FactoryTalk Historian Site Edition interface nodes and high availability for FactoryTalk Historian Site Edition servers. This session suits FactoryTalk Historian Site Edition users with intermediate to advanced knowledge of the software.

TS16 - FactoryTalk AssetCentre: Introduction and Demo
Mohit Singhai, Product Manager, Rockwell Automation

This session will review and demonstrate key FactoryTalk AssetCentre features including version control, audit information, security, reporting and automated backup and recovery of programs for Rockwell Automation devices, including Logix controllers.

TS17 - Taking Advantage of Smart Instrumentation to Make Better Business Decisions
Kris Dornan, Manager - PlantPAx Device Integration,
Rockwell Automation

Key trends such as the Connected Enterprise, Internet of Things and big data are affecting today's process industries. Each speaks to the importance of data and information in transforming businesses and keeping them competitive. A critical component in delivering the required data is the process control system and accompanying smart instrumentation. This session will discuss the information path and how our valued alliance partner, Endress + Hauser, brings world-class smart instruments to market to help companies make better business decisions.

TS18 - Terminal Automation Solutions for the Chemical Industry
Jason Knuteson, Vice President - Products & Solutions,
Endress + Hauser

This session will demonstrate a terminal automation platform designed around the PlantPAx architecture that will provide safe and efficient loading and unloading solutions for accurate, on-time deliveries, improved inventory forecasting, faster cash cycles, and improved lead times and delivery scheduling.

TS19 - PlantPAx System Infrastructure Configuration
Fabiano Fernandes, System Architect - PlantPAx,
Rockwell Automation
Jason Wright, Business Manager - PlantPAx, Rockwell Automation

This session will walk you through how to properly setup your server, workstation, and network architecture for your PlantPAx System. Topics include setting up operating systems, domain servers, security policies, and network configurations. You'll also learn about the guidance offered in the PlantPAx System Infrastructure Configuration User Manual.

TS20 - PlantPAx System Application Configuration
Fabiano Fernandes, System Architect - PlantPAx,
Rockwell Automation
Jason Wright, Business Manager - PlantPAx, Rockwell Automation
Learn best practices to configure your application on the PlantPAx
System. Topics include setting up controllers, building control
strategies, alarms, and information management. Learn about new
capabilities of the PlantPAx System 4.0 release and the PlantPAx
System Application Configuration User Manual.

TS21 - Mobility and Portability
with Today's Rockwell Software
Kyle Reissner, Mobile Leader, Rockwell Automation
Today it's easy to update friends or deposit a check utilizing your
mobile device.   Why should life in your plant be any different?
If you truly want a Connected Enterprise you need to be connected no
matter where you are located. In this session, we'll review the web,
phone and tablet tools that take you on a journey toward mobility.
Are you able to bring your own device to work? Do you need to
support mobile workers? Production, HMI/SCADA and operations
management solutions require various forms of access to data and
systems. We'll also explore how you can begin to accomplish
mobility goals through FactoryTalk products and outline some
examples of how mobility can increase productivity by double
digits in production.

TS22 - Batch Management Overview and What's New
Dan UpDyke, Product Manager - Batch, Rockwell Automation
PlantPAx batch management and control solutions offer flexible
production, equipment-independent recipe management, and
regulatory compliance. This session will explore the various batch
management tools and capabilities available to help you meet your
production needs.

TS23 - Studio 5000 Logix Designer Overview
David Rapini, Product Manager - PlantPAx, Rockwell Automation
Want to learn more about Rockwell Software Studio 5000 Logix
Designer and see how new productivity features can improve your
design experience? This session will show how new capabilities
enable scalable solutions, efficient project design, effective content
management, quicker downtime recovery and collaborative
engineering workflows.

Hands-On-Labs

HOL01 - OptiSIS Packaged Solutions:
Addressing Process Safety Applications
Mark Eldredge, Program Manager - Engineering,
Rockwell Automation
The OptiSIS™ Packaged Solution from Rockwell Automation
simplifies the deployment of Safety Instrumented System solutions.
The OptiSIS is a pre-built, pre-programmed system, which is ready
to install and configure using Cause and Effect programming. The
OptiSIS Packaged Solution is available in 50 and 100 flexible I/O
sizes, includes indoor or outdoor cabinet options, and fail safe or
fault tolerant architecture options. It offers unrivaled simplicity
and flexibility. This hands-on lab allows you to understand the
capabilities of OptiSIS as you walk through the configuration of a
simple safety instrumented function.

HOL02 - PlantPAx Process Application Development Lab
Rob Munk, Senior Commercial Engineer, 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.

HOL03 - Deploy, Optimize and Scale a Virtual
PlantPAx Infrastructure
Blaine Gerein, Product Manager - PlantPAx, Rockwell Automation
There are many ways to optimize vSphere® performance and to
configure ESXi networking and storage in sophisticated PlantPAx
distributed control systems. The best way to educate yourself is
through a hands on lab that follows the recommendations and
guidelines established in the PlantPAx characterization lab. Designed
for beginner and experienced VMware vSphere® users, this course
teaches advanced skills for configuring and maintaining a highly
available and scalable PlantPAx virtual infrastructure. (The course is
based on VMware® ESXi™ 5.5 and VMware® vCenter Server™ 5.5.)

HOL04 - New Automation Productivity Tool: Application Code Manager

Scott Jewett, Technical Course Development, Rockwell Automation
Are you looking for ways to reduce risk, cost, and time to market when building automation projects? Are you considering building a bulk engineering tool or currently have one you are tired of supporting? If so, then join this session to learn about the new Application Code Manager. This session will cover libraries and code reuse, bulk engineering solutions, and how to quickly build your automation projects.

HOL05 - Batch Best Practices: Introduction to the Batch Application Toolkit

Mark Shepard, Application Engineer, Rockwell Automation
Lloyd Larsen, Application Engineer, Rockwell Automation
This hands-on lab introduces you to a new toolkit designed specifically for developers of batch applications. It includes starter files, recipes, and HMI objects, which have been configured in a working fashion to demonstrate techniques to enhance the operator experience. Learn how you can decrease your development time and avoid common pitfalls in batch projects. The toolkit scales to multiple configurations ranging from controller-based logic to server-class executive management.

HOL06 - Extending FactoryTalk View Site Edition with ACP ThinManager

Mike Smoltz, Vice President - Business Development, ACP Company
To further simplify your FactoryTalk View SE thin client based systems, discover how ACP's ThinManager can help with centralized management of content and thin client hardware.

HOL07 - Simple Model Predictive Control Within the Logix Controller

Michael Tay, Product Manager - Pavilion, Rockwell Automation
The operational benefits realized from Model Predictive Control (MPC) are generally well understood. However, MPC can also have a significant impact on the effectiveness of plant resources from operation managers and process engineers to plant operators. This lab will familiarize users with the Rockwell Automation server- and controller-based MPC solutions which help to improve overall production line operations, including the implications for plant personnel.

HOL08 - Applying EtherNet/IP Features in a Converged Plant-wide Ethernet Architecture

Eduard Polyakov, Senior Commercial Engineer, Rockwell Automation
EtherNet/IP enables both seamless plant-wide information sharing and convergence of industrial and non-industrial network traffic, while maintaining real-time communication for control applications. This hands-on lab will cover a variety of techniques, best practices, software and products using EtherNet/IP. It will also demonstrate Network Address Translation (NAT) in Layer 2 and Layer 3 architectures, VLAN segmentation and Connected Routing. A prior understanding of general Ethernet concepts is recommended.

HOL09 - Building Applications with FactoryTalk View SE and FactoryTalk ViewPoint

Sharon Billi-Duran, Product Manager, Rockwell Automation
If you are new to FactoryTalk® View Site Edition, or need a refresher on basics, this hands-on lab allows you to pick and choose from subjects related to basic building blocks for a FactoryTalk® Site Edition application. Topics include screen creation, setting up data logs and trending, alarm setup and configuration, and an introduction to the new HTML 5 version of FactoryTalk® ViewPoint.

Customer Application Case Studies

CS01 - Anchor Glass Upgrades from PID Control to Internal Model

Kyle Fiebelkorn, Batch & Furnace Manager, Anchor Glass
Brad Downen, MES Project Manager, Stone Technologies
Working with Stone Technologies, Anchor Glass transitioned some of its challenging, slow reacting process systems to gain tighter precision control. These systems included a glass level system and a combustion burner system for glass temperature. Stone Technologies upgraded both from standard proportional-integral-derivative (PID) control to advanced process control's Internal Model Control (IMC). The IMC performance provides a significant reduction in deviation of both process variables, and also controls output without sacrificing the needed response required during unexpected disruptions.

CS02 - Iron ORE Mine, Plants, Slurry Pipeline and Port Integrate with PlantPAx Platform

Leonardo Rachid Drumond, Project & Construction Coordinator, Anglo American

Anglo American's green field iron ore project required a plant-wide system to seamlessly integrate each section of the project including the mine, concentration plant, slurry pipeline, filtering plant and port. The last two interlinked structures have their own specificities. Communication needed to occur along the 529 Km of pipeline that encompassed the project. In the port, due to the number of moving machines, Anglo required an integrated safety system to reduce risk to its employees, equipment and the environment. Anglo American chose the PlantPAx process automation system with integrated safety. The standardized solution reduced commissioning and start-up time. Standard faceplates and HMI reduced training time for operations and maintenance, and seamless communication streamlined support activities across the expansive project. Currently, the system has capacity of 26.5 M tons per year and is in the ramp up phase.

CS03 - Migration to PlantPAx System Helps BASF Achieve ISA S88 Compliance

Jeff Haywood, Senior Engineer, Maverick Technologies
Liz Benitez-Adams, Plant Manager, BASF
Thomas Le, Project Engineer, BASF

The BASF Streetsboro, Ohio plant was operating with an outdated process control system that was difficult for the site to maintain, modify, and extract needed data. To modernize its process, the facility collaborated with Maverick to deliver a new ISA S88 compliant PlantPAx automation system. Maverick provided turnkey services including design engineering, control panel fabrication, implementation, installation services and startup to help BASF navigate the limited time given for cut over to the new system. A successful startup brought the PlantPAx system online a full 24 hours ahead of schedule resulting in 180,000 units of additional product produced. With the enhanced capabilities of the new PlantPAx system, the BASF site has experienced a sharp increase in product quality, reliability and the ability to make modifications and enhancements to the process.

CS04 - Bausch + Lomb Leverages PlantPAx to "See Better, Live Better" on Its Journey to a Connected Enterprise

Tom Glenwright, Senior Controls Engineer, Bausch + Lomb
Steve Schneebeli, Director of Engineering/IT, Malisko Engineering

Bausch + Lomb, one of the world's largest suppliers of eye health products, operated a legacy DCS with limited historian capacity and the need for specialized support personnel. The legacy hardware made finding replacement parts difficult and the DCS lacked the ability to integrate with the corporate network. To help eliminate these issues, Bausch + Lomb partnered with Malisko Engineering to migrate to the PlantPAx system. Historian software dramatically improved data storage capacity, and allows for a future path for real-time, mobile software integration. By connecting the enterprise and plant-level data, the company has access to critical production and supply chain information. The solution sets the framework for better visibility and improved decision making across the Bausch + Lomb enterprise.

CS05 - Boiler Control Upgrade to PlantPAx System Lowers Energy and Operations Costs

Dr. Francisco Lorenzano, Sr. Process & Energy Management Engineer, BP
Marc L. Hunter, Vice President - NFPA 85 Boiler & Combustion Systems, Synergy Systems

Synergy's client, BP, proactively sought improvements on safe, reliable and more efficient operations. The company faced challenges related to its dual-gas fuel multi-boiler control system (4 boilers) in a United States-based research and development campus complex. The lack of a central control room meant that a boiler trip had to be manually identified, inadequate monitoring meant the cause could not be effectively determined and corrective action could not be timely and properly implemented due to the proprietary control system. Synergy implemented the PlantPAx system, a standard platform, which helped eliminate false trips. The Rockwell Automation Library of Process Objects provided a consistent user interface across all boilers leading to decreased operational costs. Improved combustion efficiency decreased energy costs by nearly 10%. Real-time reporting improved visibility plant-wide and enabled compliance with EPA and provided assurance of NFPA regulations.

CS06 - Braskem Uses Model Predictive Control to Improve Polymer Production

Gustavo Alberto Neumann, Industrial Automation Coordinator, Braskem

Isadora de Souza Moreira, Process Control Engineer, Braskem

Petrochemical company Braskem implemented virtual online analyzers and model predictive controllers, using Pavilion8® Model Predictive Control (MPC). After selecting and refining process data of industrial polymerization reactors, Braskem obtained models through advanced process control. Steady state gains were obtained using hybrid models, a combination of Neural Networks and phenomenological equations. Braskem used industrial data to identify dynamics transfer functions, which allowed it to determine time response. Configured nonlinear online inferences helped operators estimate the future behavior of low sampling rate variables and served as a controlled variable inside the predictive controller. Braskem's investment in MPC technology has paid off, and has helped it increase production by 3%, improve quality by 50%, and save 6% on raw materials.

CS07 - Virtualized PlantPAx System Improves Batch Management

Rafael Pezzella Chiea, Sales Manager, IASTECH

A global beverage company decided to invest in an automated batching solution to improve batch control and traceability in a manual production facility. Faced with process quality deviations and difficulty measuring performance, the company partnered with IASTECH Automação de Sistemas, which installed and implemented a virtualized PlantPAx modern DCS system with FactoryTalk® Batch software. Leveraging Enterprise Manufacturing Intelligence (EMI), the beverage company can now turn its production data into actionable information for informed decision making. The Rockwell Automation batch solution has led to improved quality, production and filling line performance.

CS08 - PlantPAx Modern DCS Optimizes Operations and Improves Maintenance in Wastewater District

John Costello, West Regional Technology Lead - Automation, CH2M

The Denver Metro Wastewater Reclamation District desired an advanced process automation system for its green field wastewater treatment plant that could improve maintenance and optimize operations, all while meeting compliance goals. CH2M Hill designed and implemented a virtualized PlantPAx solution leveraging mobile technology and new ISA 18.2 standards for alarming, as well as gray scale graphics. Over 60,000 tags and 6,000 alarms are monitored from an operations center that features a state of the art video wall providing visibility to the entire 100 acre facility. Secure, mobile access allows operators to monitor and control key processes from anywhere on the site. The solution improves troubleshooting, predictive maintenance and operator effectiveness, while processing nearly 30 million gallons per day (MGD) with future expansion to 75 MGD.

CS09 - The PlantPAx System Increases Plant Performance Through Design & Operation Efficiency

David J. Deeb, Project Manager, Engineering Unlimited

Anthony Eklund, Director of Engineering, Engineering Unlimited

Engineering Unlimited, Inc. optimized the design and implementation of a green field palm oil processing plant through the use of a PlantPAx system solution. Software tools offered by Rockwell Automation and a standard library streamlined engineering and reduced commissioning times. The software tools simplified the development of the various standardized control strategies required by the process. The Rockwell Automation Library of Process Objects allowed for faster commissioning of instruments in the plant, reducing overall commissioning time to 5 days. Automating key process sequences through standard Add-On Instructions improved operator efficiencies, resulting in an increased number of batches delivered per day.

CS10 - PlantPAx Premier Drive integration Helps Oil Producer Improve Artificial Lift

Christophe Brasseur, Business Manager, ITEC Engineering

A major oil and gas producer in Peru needed to expand its existing production capacity by drilling an additional crude oil well on a new well cluster. ITEC Engineering designed an alternative to the traditional outdoor specialized equipment. It integrated electric submersible pumping (ESP) control best practices with liquid cooled PowerFlex drives – all enabled by premier drive integration with the PlantPAx control system. This integration was simplified through the use of the Rockwell Automation Process Library and tools and also provided operators with rich information for improved production.

CS11 - Genentech Avoids Obsolescence by Upgrading Legacy TFF Skids with PlantPAx System

Tim Brown, Sr. Supervisor Automation Engineering, Genentech
Tom Brown, Sr. Project Engineer, Banks Integration

Considered the founder of the industry, Genentech has been delivering on the promise of biotechnology for more than 35 years. The company's original manufacturing plant located in South San Francisco, CA had some of the oldest automation systems within the Genentech network of facilities. Working with Banks Integration Group, Genentech designed, engineered, and validated the upgrade of two legacy tangential flow filtration (TFF) skids still used in commercial manufacturing. The PlantPAx platform, including HMI and batch software, enabled Genentech to avoid obsolescence and standardize its installed base, as well as pave the way for future upgrades.

CS12 - Converting a Legacy Building Management System to a PlantPAx System

Jeff Leverton, Automation Manager, Glaxo Smith Kline

The building management system that provides critical heating and cooling to a Glaxo Smith Kline facility in Zebulon, NC required an upgrade of its antiquated DCS without any downtime. The facility struggled with finding replacement parts for its legacy system and retrieving data for audits. To increase efficiency and consolidate multiple control systems, the company upgraded to a single, plant-wide process automation system built on a virtualized platform. The standard technology of the PlantPAx system allowed for easy integration of OEM equipment including chillers, boilers, compressors, and a water skid. Leveraging manufacturing intelligence, the PlantPAx system provides insight into valuable process data. Overall, the PlantPAx system has increased efficiency at the facility.

CS13 - Standardization Minimizes Project Risk and Simplifies Implementation

Jeremy Gibbs, Corporate Account Manager, Matrix Technologies

A world global leader in specialty silica gel and in can sealants needed to update an aging DCS system at its silicate plant. It needed a fully integrated, easily scalable, and easily maintainable platform to tie their process together. By collaborating with Rockwell Automation and their local distributor at the beginning of the design process and by using the Process System Estimator, they were able to minimize project risk due to hardware and software compatibility. Bringing in Matrix Technologies, a Rockwell Automation Solution Provider in Controls and Process, meant that the software design would incorporate standard PlantPAx system libraries further reducing risk during testing and implementation.

CS14 - Optimizing a Desolventizer/Toaster with Model Predictive Control

Jim Vortherms, Division Manager, Interstates Control Systems
Randy Kurth, Lead Control Systems Analyst, Interstates Control Systems

An oil seed extraction plant faced high energy costs due to conservative PID set points and unplanned shutdowns when operators failed to notice process rate changes. The company decided to work with Interstates Control Systems, Inc. on a solution. Interstates Control Systems worked hand-in-hand with the plant to implement a Rockwell Automation solution featuring Model Predictive Control (MPC) technology that uses multivariable models and current plant measurements to determine control actions. The MPC technology has positively impacted the plant, which is on track to save more than $150,000 annually and surpass initial ROI time estimates by more than 30 percent.

CS15 - Multi-Stage Migration to the PlantPAx System Improves Performance for Batch Reactors and Distillation

Charles Reagan, Senior Engineer, Lonza Microbial Control
Mike Triassi, Business Development Manager, Optimation

The outdated hybrid control system at Lonza Microbial Control was made up of a DCS, SCADA system and PLC, which ran the batch reactors and distillation at its Rochester, NY facility. The system's hardware was obsolete, and the hybrid configuration made expansion difficult. To solve its challenges, Lonza Microbial Control partnered with Optimation and standardized on a virtualized PlantPAx system. The modern DCS offered a competitive price point, provided common hardware for the entire facility and improved reporting and visibility. It helped achieve a top priority of having the smallest business impact as possible by breaking the changeover into five separate one day cutovers. With expansion on the horizon, the standardized system is all set to include additional processes in the facility.

CS16 - Method's LEED Platinum U.S. Soap Facility Uses PlantPAx System to Clean Up

Andy Ondracek, Senior Director of Manufacturing & Supply Chain, Method
Doug Hinckley, Senior Process Engineer, Grantek Systems

Method, an innovative green cleaning products manufacturer, standardized on the PlantPAx system to operate its first manufacturing facility. As the first Leadership in Energy & Environmental Design (LEED) Platinum facility in the industry, Method uses solar tracking trees, a wind turbine, and a green roof – which also helps to revitalize the Pullman neighborhood in Chicago that it calls home. Partnered with Grantek Systems Integration, the facility came to life under a tight deadline. It leveraged the Rockwell Automation Library of Process Objects to manually run control modules to start up the plant while installation of major equipment and wiring took place. The scalable PlantPAx architecture allows for future expansion, and will help Method as it looks to expand capacity in the upcoming year.

CS17 - Mosaic Fertilizer Converts Multiple Legacy Control Systems to a Single PlantPAx System

Greg Hopkins, Project Manager, Champion Technology Services

Mosaic Fertilizer's 40-year-old controls were primarily manually operated, outdated, and potentially hazardous. The system used several control platforms, multiple relay panels, single-point control with timing relays, and unreliable hard-wired relay logic. Champion provided upgraded and centralized control of the entire plant by migrating to a single, modern PlantPAx DCS system. The company integrated all existing logic into one controller with multiple operator consoles and three remote I/O panels. With the PlantPAx system, Mosaic experienced improved control throughout the plant, enhanced safety, and reduced costs in system maintenance.

CS18 - Phased Approach Keeps Nidera Operating During Migration to the PlantPAx System

Horacio Norberto Labin, Chief of Energy Supply, Nidera

Nidera's soy crushing facility in Saforcada was operating with an outdated process control system at risk of obsolescence. This facility needed a single, plant-wide system to help improve control throughout the facility. The company also needed to avoid shutdown, and upgrade in phases due to production schedules. With the phased migration to the PlantPAx system, that Nidera is completing this year at the pace it needed, it gained improved diagnostics and reporting capabilities, leading to enhanced visibility of the plant's fully migrated areas. The PlantPAx system also provides the scalability needed for future expansions and the ability to incorporate advanced process control capabilities at Nidera.

CS19 - PEMEX Standardizes on Rockwell Automation Technology for Terminal Automation

Rodrigo Antonio Gracia Mendivil, IT Coordinator, Petroleos Mexicanos S.A. de C.V.
Martin Velazquez Gutierrez, Technical Expert Coordinator, Petroleos Mexicanos, S.A. de C.V.

Petroleos Mexicanos needed a solution for its PEMEX terminal automation that provided reliability in harsh conditions, minimized false alarms from the field, enhanced network communication and improved availability for spare parts and technical assistance. It filled these needs with an integrated critical control and safety system based on the Trusted® controller. Delivered by Rockwell Automation Global Solutions, the solution helped minimize start up time, helped improve fuels monitoring and dispatching at each facility, and helped improve safety for PEMEX personnel.

CS20 - The Evolution of Industrial Safety Standards and Implementation within Repsol E & P Facilities

Marcelo Villegas, Project Engineer, Repsol Ecuador

Repsol was facing issues in its crude production fields given the age and condition of the process safety system in its plants on Block 16. A migration was needed, but the company could not risk stopping production. Repsol defined a phased migration of its Safety Instrumented System (SIS). The move to a Rockwell Automation control platform made sense for Repsol since it had an installed base of Rockwell Automation technology, and it could count on a local customer support and maintenance team. The facility continued to produce crude barrels throughout the migration and now meets IEC 61511 safety standards and 00-00238, Repsol's corporative standard.

CS21 - Furnace Appllication Benefits from Virtualized Solution with Zero Clients

Alex Teixeira, Systems & Process Control Engineer, Hatch

When Rio Tinto Minerals Boron Operations needed to upgrade their control system for a melting reverberator furnace, the project requirements were largely driven by the harsh and damaging environment, which consisted of high temperatures and a dust-filled atmosphere. The company decided to implement a control architecture composed of a virtualized PlantPAx system with zero clients. The architecture enabled the installation of cost-effective zero client HMI stations closer to the furnace, thereby improving operational flexibility and allowing for easy replacement should the environment exceed the design conditions. The PlantPAx Virtual Image Templates and the Rockwell Automation Library of Process Objects helped to save development time and provide consistent faceplates that give operators the actionable information they need. In addition, improved design during the upgrade relocated 10 variable frequency drives previously found near the furnace to a clean, air conditioned electrical room.

CS22 - Schaeffer Manufacturing Achieves World-Class Performance in New Facility with the PlantPAx System

Jim Carroll, Vice President of Technical Services,
Schaeffer Manufacturing
Mike McEnery, Project Manager, McEnery Automation

When grease and lubricant sales exceeded Schaeffer Manufacturing's production capacity, the company needed to build a new manufacturing facility. Keeping in mind its 175 years of delivering world class performance, the company decided to partner with McEnery Automation to implement a virtualized PlantPAx system. Schaeffer implemented the PlantPAx system at a lower initial cost, and gained easy scalability for future expansions. The PlantPAx system gives operators a consistent interface on HMIs and batch control workstations, and has significantly reduced batch time, batch heating setpoints, and energy usage. It has allowed Schaeffer to quickly react to changing production requirements due to easy recipe changes and a modular programming design.

CS23 - Migration to PlantPAx System Offers Control Flexibility with a Smaller Footprint

Scott Moll, Principal Process Control Engineer, Tate & Lyle
Brian Goodner, Process Control Engineer, Tat & Lyle

Tate & Lyle, a global provider of high-quality ingredients and solutions to the food and beverage industries, needed to upgrade its control system. Increased failures of outdated hardware combined with the high cost of maintaining the legacy system had complicated operations. A phased approach to the PlantPAx system, with virtualized HMI, continued plant production during migration and addressed space constraints. The new system offers control flexibility, improved availability of spare parts and reduced maintenance time. A smaller footprint in the rack saved approximately $200 per I/O point. Most importantly, the PlantPAx system established a standard control architecture for the company, from which it can grow.

CS24 - Solution Partner Deploys PlantPAx Platform in Increase Throughput

Greg Clark, Engineering Manager, TriCore, Inc.
Tim Dresen, Director of Business and Manufacturing Intelligence, TriCore, Inc.

TriCore's client, a yogurt plant in the northeast U.S., needed a single, plant-wide process control system. The project required robust recipe management, lot tracking of raw materials, tracking of user activities, and data collection and reporting to meet Safe Quality Food (SQF) Institute requirements. TriCore implemented the PlantPAx system to address the sophisticated process controls and exceeded the client's recipe management requirements. Improved visibility into all aspects of processing helped resolve scheduling, inventory, tracking and production reporting. Overall, production throughput increased making the plant more profitable.

CS25 - Yuhan-Kimberly Implements Modern PlantPAx System In Order to Increase Production of Personal Care Products

J.K. Lee, Project Engineer, Yuhan-Kimberly

Korean based Yuhan-Kimberly, Asia's top personal hygiene paper manufacturing facility, could no longer meet production goals with its legacy DCS. It looked to Rockwell Automation for a modern process solution that included safety control. The PlantPAx system with EtherNet/IP networking provided a single platform for process, discrete and safety control. Delivered in spec and on time, the facility's new system has experienced zero downtime since completion date and reached full production during week one.