



An Affiliate of The Reynolds Company

### User Group Online Seminars

## **Automation Fair Preview**

October 2022

### Technical Seminars from TRC Register to receive a calendar invite



### TECH TALK

Month	TechTalk Topic	YouTube Link
January	Installed Base Evaluations (IBE) Overview	https://youtu.be/pwPs8NuF2KE
January	Stratix Portfolio Update	https://youtu.be/8eUy8feCtXM
February	Energy Monitoring with PowerMonitor	<u>https://youtu.be/uNo-y-QDHIE</u>
February	Quality Remanufacturing by Rockwell Automation	<u>https://youtu.be/rC1oo_TGjKU</u>
April	ESolutions Punchout Integration	https://youtu.be/mWLCREX40f <u>w</u>
May	Proactive Digital Maintenance Strategy with Fiix	https://youtu.be/h9IYGVbRLHg
June 8	Impact of DCOM Hardening Patch	https://youtu.be/qYte4oRNzCk
July 27	Remote Access Solutions	<u>https://youtu.be/6ZhsRapp8</u>
Aug 31	Stratus Disaster Recovery	https://youtu.be/0Ctjxlx6G_w
Sept 28	Skill Development: The Rockwell Certificate Program	

#### **USER GROUP**

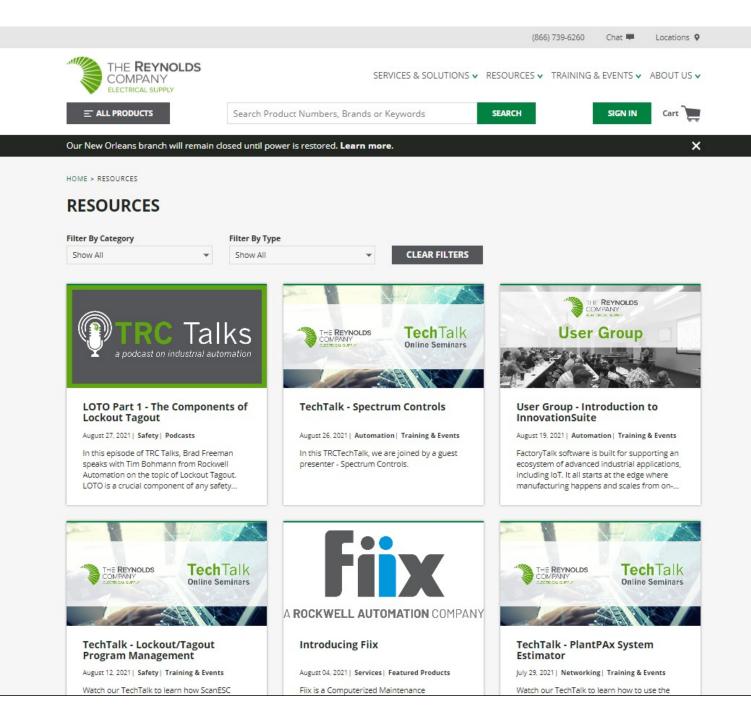
Month	Description	YouTube Link
January	Rockwell Automation Controllers & I/O	https://youtu.be/ovmxFPIv-ZI
February	Intro to Rockwell Automation Operator Interfaces	https://youtu.be/82tyizbn0GQ
March	Smart Safety for Machines	https://youtu.be/rjihZ2wWIsM
April	Studio 5000 Update	https://youtu.be/tT3FANr8JEA
May	Process System Update	https://youtu.be/_ALxxNuzBms
June	CLX Redundancy Network Architectures	https://youtu.be/5ghP4bUi-OE
July	Modernization Solutions	https://youtu.be/EgZQwRuaO9o
August	Integrated Power and Process Update	https://youtu.be/N4rLtpmfSJc
September	HMI Design Guide	
October	Automation Fair Event Preview	

### Visit our Resources page on reynoldsonline.com

## Updated Website

### **Resources Section includes**

- Blog articles
- Podcast
- Videos
- News



### **Our Presenters**

### Wayne Welk

Automation Specialist The Reynolds Company New Orleans

### David Nute

Process Business Development Lead The Reynolds Company Houston



## Automation Fair<sup>®</sup>



## JOIN US AT AUTOMATION FAIR

#### NOV 16-17, 2022 · CHICAGO, ILLINOIS

#### HOTEL PACKAGES AVAILABLE!

Book a hotel package with The Reynolds Company and get a ticket to our hospitality event and shuttle service to/from the convention center and our event.

The deadline to book a hotel package is **October 31**.

Learn more about hotel packages and Automation Fair registration at <u>www.reynoldsonline.com/automationfair</u>

#### AUTOMATION FAIR

We hope you will join us so you can interact with IT/OT professionals and network with innovation experts, company executives, and thought leaders and peers in your field. The event will feature

- Hands-on labs
- Product and technology sessions
- Industry forums
- Expo show floor





## JOIN US AT AUTOMATION FAIR

NOV 16-17, 2022 • CHICAGO, ILLINOIS

#### THE REYNOLDS COMPANY HOSPITALITY EVENT SPONSORS

Acme Electric Belden Brady Burndy CoreTigo Dialight Fluke Hammond Power Solutions Hubbell Wiring Devices Killark

Littelfuse Mersen nVent Hoffman Panduit Post Glover Resistors Powerohm Resistors ProSoft Technology Southwire Spectrum Technologies Stratus Technologies

## JOIN US AT PSUG

NOV 14-15, 2022 • CHICAGO, ILLINOIS, USA rok.auto/psug|#ROKevents

Focused on the value the systems and technology Rockwell Automation and its Partners can deliver and the Results Achieved by our process customers.

#### Learn More and Register!

<u>399\$ Early Bird through end of October</u>, 599\$ After

#### PSUG 2022 Run of Show

• 18 Customer Application Stories•

24 Technical Sessions

- ries• 5 Round Table Discussions • Community building evening
  - Community building evening social event
  - Keynote

#### \* As of 8/22 Full Details Forthcoming

7 Hands-on Labs



Process Solutions User Group

Monday Social and Networking Located in: <u>River East Plaza</u> <u>Address</u>: 435 E Illinois St, Chicago





## The Process Solutions User Group:

### Interactive Learning through Deep Dive Sessions

#### Round Table Discussions

 Learn how process leaders across the globe are stepping up in unique ways to better serve their customers during these unprecedented times. Join us for panel discussions where experts discuss how they are defining, transforming, and innovating through topics including cybersecurity, DCS system and design deployment, batch management and power.

#### **Customer Led Sessions**

 Learn from industry leading peers who have achieved a Connected Enterprise through PlantPAx<sup>®</sup> DCS and Rockwell Automation. This peer learning opportunity addresses the unique challenges faced by select customers and how they implemented measurable business outcomes with the help of Rockwell Automation and Partners.

#### Product and Technology Sessions

• Expand your insight into the latest process automation technologies. These technical sessions include control strategies, optimization, analytics and batch automation.

#### Hands-on Labs

• Get hands-on experience with the latest PlantPAx technology and supporting platforms

#### Keynote Presentations

 Explore ongoing developments in the Rockwell Automation roadmap that aim to deliver increased value for process industries and to help users benefit from the full breadth of solutions provided entire Rockwell Automation delivery ecosystem

#### Monday Evening Social and Networking Event

Relax at the end of the day and visit with industry professionals and technology experts while enjoying dinner and games.



## PSUG 2022 Session Listing



#### **Process Solutions**

User Group

#### Labs

- Introduction to the PlantPAx Process System for Operational Efficiency
- Introduction to the PlantPAx Process Controller and Engineering
- > ThinManager® Engineered for Results Hands-on Lab"
- Reporting Capabilities and Health
   Dashboards within PlantPAx (NEW)
- > FactoryTalk Batch V15
- > Asset Inventory Manager
- > Process History Tools and Production Optimization
- Improve Hard to Measure Quality with a FactoryTalk® Analytics® Data Explorer Virtual Online Analyzer®

#### Technical Sessions

Using State-Based PID Controller Analytics to

DCSNext - Control System Migrations from

Addressing market challenges with PlantPAx

> Designing and delivering a high performance

A New Fault-tolerant and Universal I/O for your

> Understanding Alarm Management in the Process

Visualization and UI Methods to Improve Operator

PlantPAx analytics enabled: reports with Thingworx

System Orchestration: A New Method to Deploy,

Responses in Abnormal Situations with PlantPAx

Justification through Sustainable Operations

Advanced Physical Layer - The new Ethernet based

> Know the value of a PlantPAx system today and for

> Proactive approach to plant lifecycle management

Integrating Intelligent Power Devices with PlantPAx

> Implementation of PlantPAx System. Best Practices

Increase Uptime and Throughput

infrastructure for process

the future

with PlantPAx

PlantPAx system

PlantPAx system

Industries

and SSRS

and Recommendations

Configure, and Manage Servers

DCS

- Modernize your Legacy DCS to PlantPAx, with Reduced Risk & Less Downtime to achieve value
  - System Cybersecurity Best Practices and Advances
  - "Effective Batch Operations with PlantPAx and FT Batch"
  - Model Predictive Control: Taking your DCS from chasing disturbances to achieving autonomous operations
  - > Leveraging FactoryTalk Historian to optimize your operations
  - > Bringing Teams Together in the New FactoryTalk<sup>®</sup> Design Hub
  - Edge Orchestration and Data
     Contextualization at Scale to Power Digital
     Transformation
  - > Deciding the best control system for Burner Management Systems
  - Achieve digitization and sustainability goals with FactoryTalk Energy Manager
  - Resilient control systems for high-availability
  - Introduction to the PlantPAx EventQ: how to trigger and log controller-based events
  - Integrate power and process using IEC-61850 and EtherNet/IP
  - > Process Network Lifecycle Management

#### **Round Table Discussions**

- The PlantPAx System
- Batch Management and Control
- > Sustainability and ESG

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- Cybersecurity
- > Industry Trends in Process

#### Customer Delivered Sessions\*

- > Automation Plus, A Plus Group Company
- > Automation Werx, LLC
- ≻ E Tech Group
- > Banks Integration
- Green Bay Packaging
- ➢ INCONTROL S.R.L.
- PETRONAS
- Procter and Gamble
- ➤ TENG Inc.
- > Thermo Fisher
- > ECN Automation Inc., End User: Consorcio Minero Benito Juarez Peña Colorada S.A. de C.V.
- > Sensia

\* Subject to Change



Automation Fair Nov 16-17, 2022 Chicago, IL, USA

expanding human possibility°



## Industry Forums

Auto & Tire: A Transformative Era: Key Areas of Focus Deliver End-to-end Success

Chemical: Improve Operations, Meet ESG Goals by Taking Advantage of Digitalization

Food & Bev: Scaling Programs, Realizing Value and Taking the Next Step in DX

Life Sciences: DX for an Evolving Industry

Mining & Metals: Leveraging Technology for Better Decision Making, Optimized Operations and People Safety



Sustainability (EN & ES): Reaching Net Zero: Trends, Technologies and Transformation OEM: Delivering Results at Times of Uncertainty

Oil & Gas: Digitalization: Unlock Hidden Operational Improvements, Meet ESG Goals

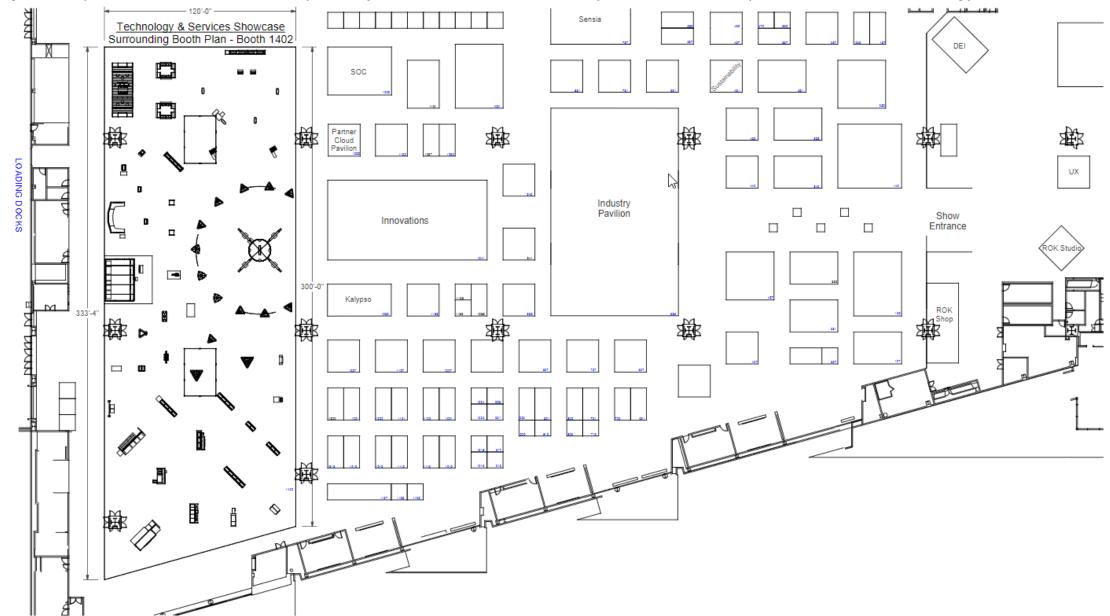
Pulp & Paper: Trends in Automation Enabled Transformation

Warehousing & Logistics: Innovative Approaches to Meeting Skyrocketing Demand

Water/Wastewater: Innovative Smart Water Solutions for Security and Sustainability

## AF22 Chicago Show floor experience

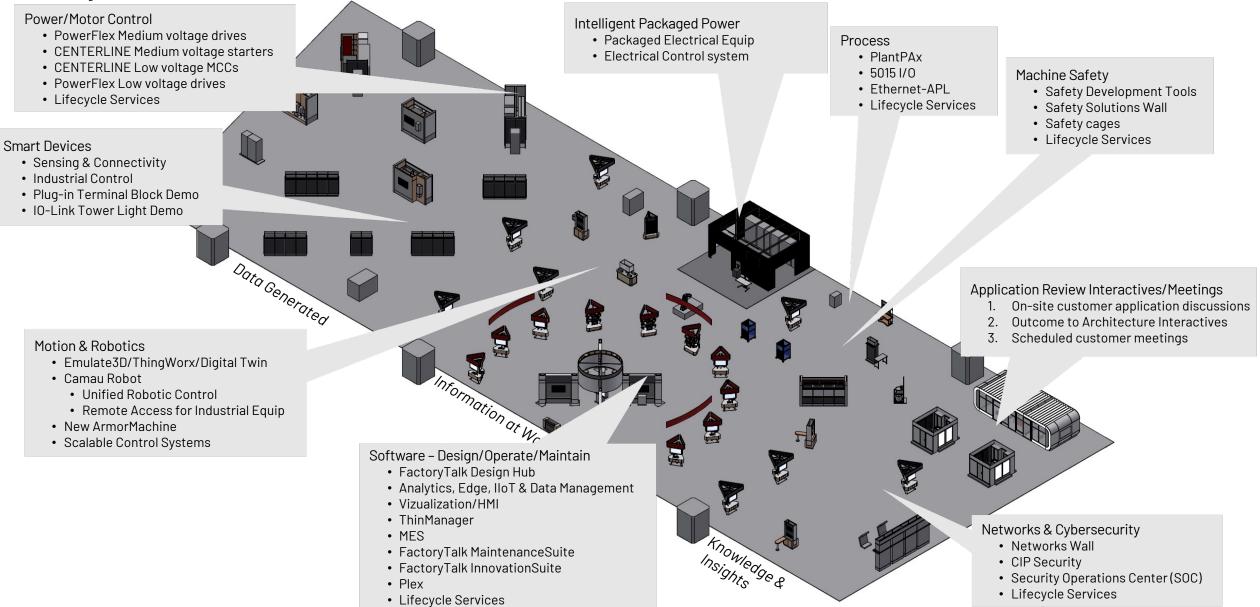
Designed to provide a more directed journey for customers – industry to solutions to products and technology



#### Showfloor Experience

## AF22 Chicago: Technology & Services Showcase

Showing attendees how to achieve their desired outcomes



#### **Consumer Packaged Goods**

- MightyQ interactive: incl. Plex, Kezzler, Kalypso
- SKU of you: ICT, robotics, EC AAGARD
- Augmented workforce: robotics, Fiix, Plex - DCC

#### Pulp & Paper

- Virtual plant demo
- Remote connectivity live demo
- Modernization/optimized process

#### Warehousing & Logistics

- Virtual warehouse interactive: motion, simulation
- Digital modeling/data science
- Smart sortation: ICT, E3D FLEXLINK

#### Auto & Tire

- Material movement, RA motors demo
- E2E battery solution, Battery demo
- Digital Tire, XT Tire, Tire demo, Kalypso/MES/APM
- Tier 1 PLEX QMS demo, Cybersecurity
- AR/VR with car

## **Booth Content**

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#### **Mining and Metals**

- Optimized processes: Unified control, power, devices & MPC
- Reliable assets: AR ball mill experience & APM
- Raw material to market: MOM (Mining Operations Management) & sustainability / W.A.G.E.S. interactive (for metals)

#### Oil & Gas

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- Partnering with Sensia to achieve ESG goals
- RA + Sensia complete end-to-end solutions from reservoir to refinery
- Automated operations to optimize well and field productivity

#### Chemical

- Digital solutions for ESG goals Digital tech to improve operator and maintenance efficiency
- Batch manufacturing from lab to end product

#### Industry Solutions - NEW

#### Water & Wastewater

- Smart Water/Digital Operations
- Reliability & Lifecycle Services: IBE, CSM services, Fiix CMMS demo,
- Secure/Remote operations: (NSS), FT Remote Access

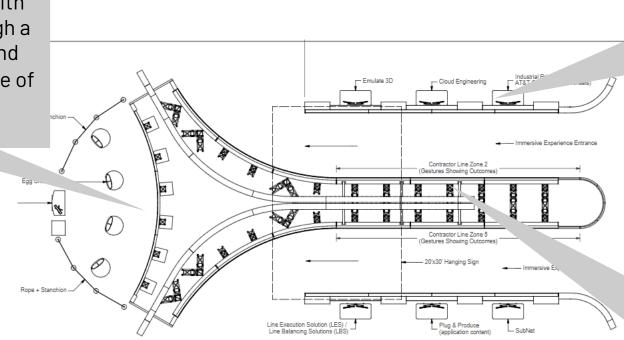
#### Life Sciences

- Flexible Manufacturing: Pharma plant interactive
- Speed to market: PAT, tech transfer
- Med Device: Kalypso solutions

## **Innovations Booth Content**

See how Rockwell Automation connected our own operations with a digital thread. You'll see connections between what we're launching today and where we're headed in the future. Experience virtual reality designed to enhance industrial operations. Talk to our experts and explore how the latest in automation technology can help your operations deliver results today and take a peek into the future.

Experience results achieve with our own contactor line through a digital twin. Take a VR tour and experience firsthand the value of a digital twin and outcomes achieved



Talk to experts around current and future developments where Rockwell continues to innovate to help customers achieve results today and into the future

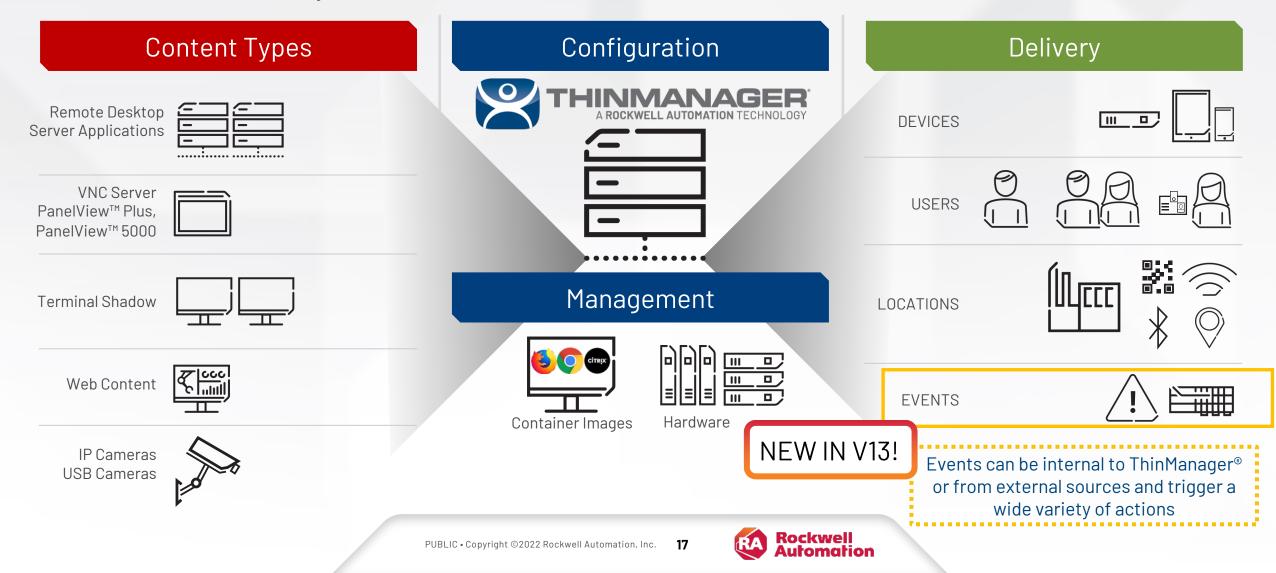
In this immersive experience you will see the contactor line in action. Utilizing gesture technology, you will be able to interact with the contactor line and expose results achieved around the 5 customer outcomes



## **Automation Fair Preview**

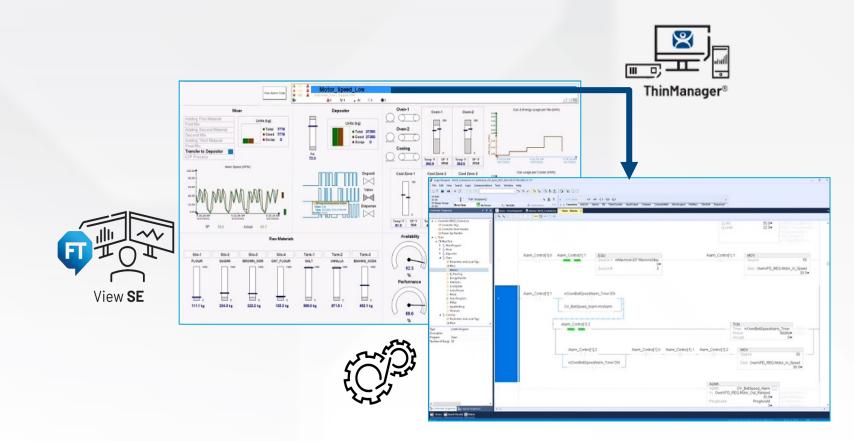
## Secure content delivery to every user, device and location

Centrally manage the secure deployment of your industrial applications to devices and users based on their role, their location in the facility and at the time an event occurs



## ThinManager® Logix PinPoint

Portfolio Integration with FactoryTalk® View SE, Studio 5000® & ControlLogix®



Coming soon!

Automatically view alarm triggers within Logix code

Easily train new employees with little to no coding knowledge







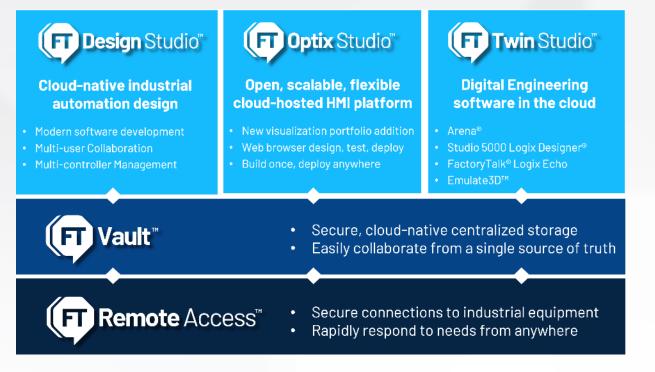






**(FT Design** Hub<sup>™</sup>





### FactoryTalk<sup>®</sup> Design Hub™

- On-demand platform that provides you and your customers design automation systems that:
  - Reduce risk
  - Accelerate schedules
  - Enable better agility
- FactoryTalk<sup>®</sup> Design Hub<sup>™</sup> uses the cloud to:
  - Increase scalability
  - Reduce capital & maintenance expense
  - Deliver new tools that increase productivity





# Design better together with a secure, cloud, centralized file storage platform

### Cloud-Based Team File Repository

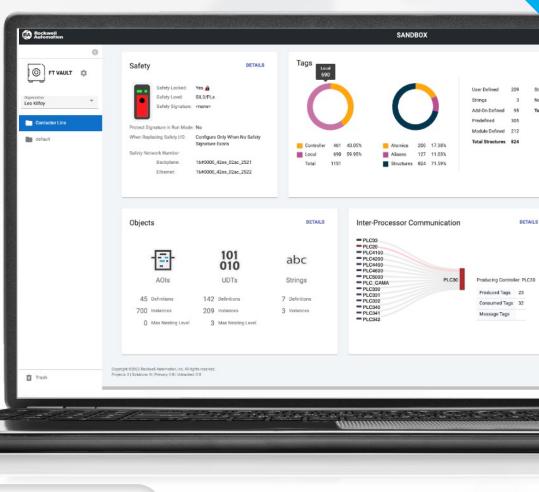
### Integrated Design Tools provides File Context

- Collaborative file sharing across your Team
- Centralize Storage providing a Single Source of Truth
- Role-Based Access Control to Control who can view/download/change
- Precise Version Control to know that you are always on the latest version
- Project History to know who changed what and when

- Project Analysis provides indepth analysis
- Upgrade one or multiple project files
- File Type Conversion to common industrial formats
- View Control Files directly from your browser
- Visually Compare file version to better understand changes made



21





Cloud-native, software-defined industrial automation design

### Modern

- Reduce development time with proven workflows
- Improve reuse management and mass creation
- Remove maintenance and access burdens

#### Multi-user

- Automatically merge edits from multiple users
- Monitor and approve any project changes
- Develop in text and deliver graphically

### Multi-controller

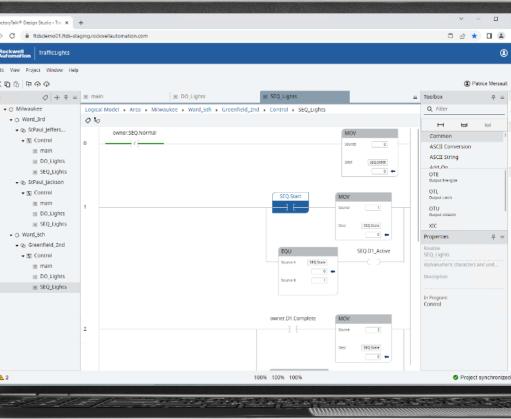
- Configure and manage all devices in one place
- Connect to multiple firmware revisions
- Deliver a system model abstracted from hardware



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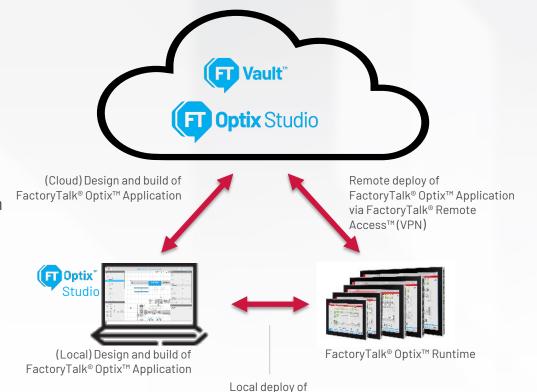




Available Nov. 2022 **GAN OPEN, Scalable, flexible, visualization platform** 

- Modular deployment uses only the components needed to run the project
- Responsive graphics detects screen size and adapts layout accordingly
- Multi-user collaboration using a webbased designer in the cloud
- Version control using industry tools such as FactoryTalk<sup>®</sup> Vault<sup>™</sup> and GitHub
- Open architecture fully extensible with C# programs
- Remote management –update and maintain projects online

- Third-party support built-in connectivity to non-Rockwell Automation devices
- Internet of Things connectivity support for smart manufacturing and Digital Transformation
- Scalable platform The same application can be deployed to a closed panel, Station, or Distributed architectures
- OPC UA is core to the platform enable machine-to-machine communication or machine-to-cloud communication



Available Dec. 2022

FactoryTalk<sup>®</sup> Optix<sup>™</sup> Application

Rockwell

Automation



### On-Demand Design, Simulation and Emulation Capabilities

- Access design tools from your web browser whenever, wherever you like
- Collaborate on a common model
- Sync with FactoryTalk<sup>®</sup> Vault<sup>™</sup> to ensure that everyone is always using the latest version
- Validate upgrades and changes and virtually commission your system
- Scale compute resources as your model/team grows
- Scale development expense to actual usage





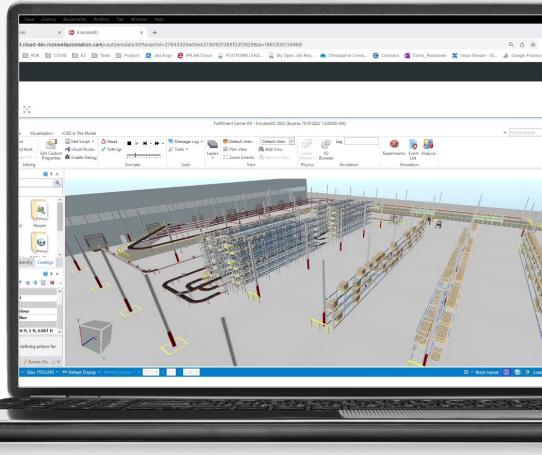
FactoryTalk® Logix Echo



Emulate3D<sup>™</sup>







## FactoryTalk<sup>®</sup> Remote Access<sup>™</sup>

Securely Access Automation from Anywhere

- Directly access machines, controllers or HMI from anywhere, anytime using a remote access VPN
- Enable SIs or OEMs to connect to their customers to troubleshoot equipment or remotely train equipment customers without being onsite
- Remote connections support remote desktop, chat
- Uses industry standards for cybersecurity





FactoryTalk<sup>®</sup> Remote Access<sup>™</sup> Manager



Available

Now

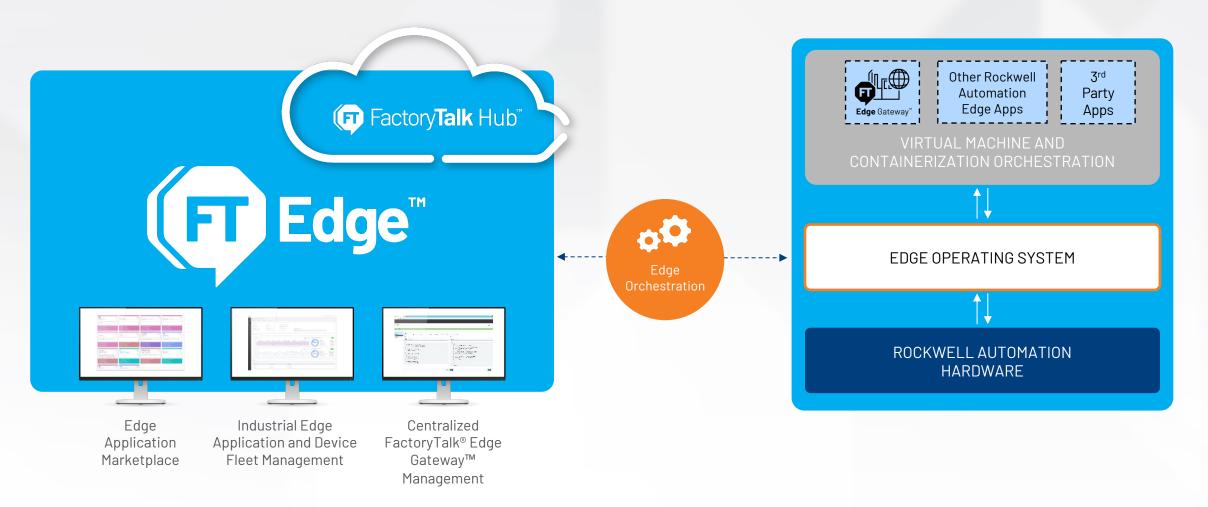
Stratix® 4300 Remote Access Router

FactoryTalk<sup>®</sup> Remote Access<sup>™</sup> Runtime



## FactoryTalk® Edge

SaaS for edge management, orchestration, and application deployment





## FLEXHA 5000™ I/O platform details

- Standard and safety (SIL 3) I/O
  - Single channel SIL 3
  - Standard and safety can be intermixed on common rail
- Modules can be used in both a simplex or duplex configuration
- 48 and 96 channel solutions, each adapter pair can support up to 24 modules
- High availability architecture redundant:
  - Network adapters
  - Power
  - Backplane
  - 1/0
- Wiring is NOT disturbed when replacing a module or base
- Removal and insertion of module under power (RIUP)
- Ability to add and remove modules during runtime
- Z-insertion and removal of all components
- Horizontal and vertical mounting
- Extended temperature range (-40 to 70 C)
- Copper and fiber port connections

DCS focused I/O delivering:

- Universal I/O availability
- Diagnostics
- Current sourcing
- Analog HART support
- Channel isolation
- PRP and DLR support for PlantPAx<sup>®</sup> systems
  - Fault tolerant connections to each adapter with concurrent communications



## FLEX 5000 portfolio

FLEX 5000® I/0

- Single I/O platform with standard and safety I/O (failsafe) for process applications
- Reduces engineering through tight integration with the PlantPAx<sup>®</sup> 5.0 system
- Designed for Hybrid & Process Industry



FLEXHA 5000<sup>TM</sup> I/O

- Fault-tolerant I/O platform development for critical process applications
- Reduces engineering through tight integration with the PlantPAx<sup>®</sup> 5.0 system
- Designed for Process Industry



### Industries Oil & Gas **Power Generation** •( ) Metals •( ) Mining •() Chemical •( ) Life Sciences Machine Safety & Process Safety •()

### **Automation Fair Preview**

The Rockwell Automation exhibits will showcase the newest in hardware, software and services.

Here's a preview of what will be featured!

### Hardware

140G Through the Door Rotary Operator
141C IEC Starter Mounting Systems
42EA RightSight<sup>™</sup> S18 Photoelectric
Sensors
432ES GuardLink<sup>®</sup> to EtherNet/IP Adapter
450L Perimeter Access Control (PAC)
GuardShield<sup>™</sup> Safety Light Curtain
58RF UHF RFID Sensor

59RF HFRFID with IO-Link Sensor

700-FE Economy Timing Relays

700-FS DIN Rail High-performance Timing Relays

700-HL Next Generation Terminal Block Relays Armor PowerFlex<sup>®</sup> Drive ArmorBlock 5000<sup>™</sup> I/O ArmorKinetix<sup>™</sup> Distributed Servo Drive ASEM<sup>™</sup> 6300B Industrial Box PC ASEM<sup>™</sup> 6300M Industrial Monitor ASEM<sup>™</sup> 6300P Industrial Panel PC ASEM<sup>™</sup> 6300T Dual Display Port Thin Client CompactLogix<sup>™</sup> 5370 Controllers Compute Module Series B Embedded Edge Compute FLEX 5000® I/O FLEXHA 5000<sup>™</sup> I/O Module

GuardLogix<sup>®</sup> 5580 XT Programmable Automation Controller
Micro850<sup>®</sup> Programmable Logic Controller
Micro870<sup>®</sup> Programmable Logic Controller
OptixPanel Graphic Terminals
PowerFlex<sup>®</sup> 755TR Liquid Cooled Drive
PowerFlex<sup>®</sup> 755TS Drive
Profinet Option Card for PowerFlex<sup>®</sup> 520series Drives
QuickStick<sup>®</sup> 150 Intelligent Conveyor System
Stratix<sup>®</sup> 5200 Switch



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### Software - Cloud

Software

FactoryTalk<sup>®</sup> Design Studio<sup>™</sup>

FactoryTalk® Edge

FactoryTalk® Optix

FactoryTalk<sup>®</sup> Remote Access<sup>™</sup> Solution

FactoryTalk<sup>®</sup> Twin Studio<sup>™</sup>

 $FactoryTalk^{\circledast} Vault^{{\mbox{\tiny M}}}$  with Design Tools

Fiix CMMS Software

Plex Asset Performance Management

Plex MES

Plex Production Monitoring

Plex Quality Management System

Connected Components Workbench<sup>™</sup> Version 21.00

FactoryTalk® Logix Echo Version 2

FactoryTalk® Motion Analyzer

Rockwell Automation Industry Solution - Batch Performance Analytics

Studio 5000 Logix Designer® Version 35

ThinManager® Logix PinPoint

### Services and Solutions

Endpoint Detection Services Incident Response Retainer Managed Threat Detection Services My Equipment Digital Services PlantPAx® 5.20 VersaVirtual<sup>™</sup> Appliance Series B



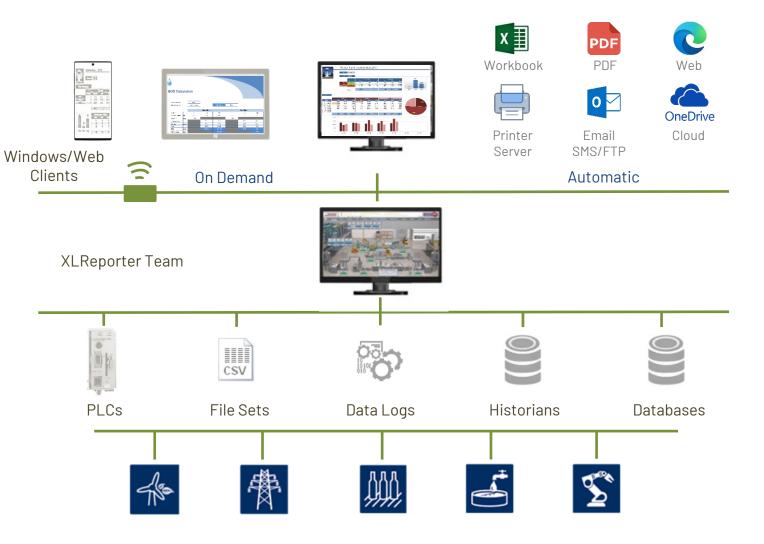


## Technology Partners

## XLReporter: Measure. Analyze. Improve.



- PLC (no database/historian)
- FactoryTalk View ME and SE
- FactoryTalk Historian SE
- FactoryTalk Alarms & Events
- Straightforward Licensing
  - Perpetual License, Not SaaS
  - No limits on Tags, Reports
  - Dedicated in-house support
- Features beyond Reporting
  - Manual Data Entry
  - 21CFR 11 Features
  - ISA 18.2 Alarm Reports



BRONZE



- Cable entry systems provide safe, organized cable entry into enclosures & electrical equipment
- Secure cables & provide strain relief while maintaining enclosure UL/IP/NEMA ingress sealing ratings

For cables with & without connectors



# **PANDUIT - Automation Fair 2022 - Chicago**

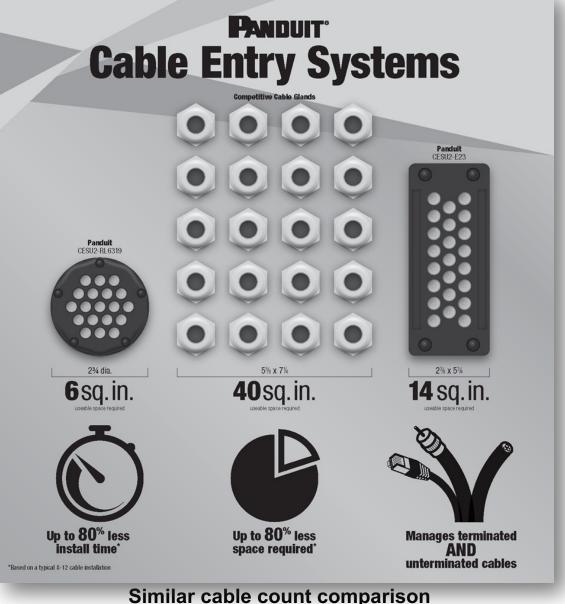
### Lowest Total Installed Cost Solution

### Vs cable glands:

- Up to 80% less install time
- Up to 80% less space required
- Glands generally manage unterminated cables;
   CES manages both terminated & unterminated
- Extra CES holes in same footprint for future cabling moves, adds & changes



www.panduit.com/cable-entry-systems





## **PANDUIT - Automation Fair 2022 - Chicago**

Electrical -

- Ferrules/Tools/Terminals
- VeriSafe 2.0
- PXE Printers Mobile Printing Systems
- CES (Cable Entry System) launching January 2<sup>nd</sup>







Network Infrastructure -

- Industrial Fiber
- Industrial Copper
- Single Pair Ethernet
- 4-post rack, which will feature traditional Enterprise copper solutions cable, jacks, patch cords, plugs, and patch panels (including RapidID)
- Adjustable 4-post rack,
- PatchRunner 2 vertical cable managers
- Micro Data Center
- UPS (Uninterruptible Power Supply)
- IDF (Industrial Distribution Frame)
- TrueEdge Wall Mount Enclosure
- Control Panel solutions including Cable Entry System (CES)

We will also have Industrial Services in the booth, and we will be promoting CPwE, which is Converged Plantwide Ethernet – a consortium of Panduit, Cisco, and Rockwell, with pre-designed architectures for industrial environments.

### Automation Fair 2022 Learning+ Promotion





#### **AUTOMATION FAIR® EVENT**

The Automation Fair® event is returning to Chicago, IL on November 16-17, 2022. We hope you will join us so you can interact with IT/OT professionals and network with innovation experts, company executives, and thought leaders and peers in your field. The event will feature engaging keynote presentations, interactive training and learning, industry-centric discussions, and the latest innovations from Rockwell Automation and their PartnerNetwork™ affiliates. You can also earn Professional Development Hour (PDH) credits for attending labs or technical sessions.

#### 25% OFF LEARNING+ SUBSCRIPTION

If you attend Automation Fair, you can save 25% on an annual Learning+ subscription from Rockwell Automation. Take advantage of this opportunity to get access to some of the most popular courses from Rockwell Automation.

#### VIEW LEARNING+ COURSES

#### Resources

Book Your Hotel Package Register for Automation Fair View Session Catalog Automation Fair® Event Page Add to Calendar (Outlook) Learn More about PSUG



annual subscription when you attend Automation Fair®