

ROK LIVE

A Rockwell Automation Event



1-3 March 2022

ROKLive 2022 Sydney

Agenda

1-3 March 2022

Sydney Olympic Park

DAY 1 - Tuesday, 1st March

Time	Description						
8:30am	Registration Open						
9:00am	Event Welcome - Jake Barker, Field Marketing Manager - Australia & New Zealand, Rockwell Automation KN01 - Opening Keynote - Bringing the Connected Enterprise to Life Presenter: Anthony Wong, Regional Director, South Pacific Region, Rockwell Automation Location: Show Floor						
9:45am	KN02 - World War Data: How Data, Analytics & AI Will Dominate the Business Battleground of the Future Presenter: Stephen Scheeler, founder of global advisory The Digital CEO, Senior Advisor to McKinsey & Company, and Executive-in-Residence at Asia-Pacific's leading business school, the Australian Graduate School of Management - he partners with the senior leaders of some of the world's leading companies to help them build world-beating strategies, capabilities, culture and leadership, including Qantas, nab, Westpac, Macquarie Bank, ANZ Bank, Commonwealth Bank, IAG, Suncorp, Telstra, Wesfarmers, AMP, CUB, Brambles, Google, DellEMC, Lenovo, Seven West Media, MCN, QBE, Hollard, BAT, JB Hi-Fi, Bunnings, Flight Centre, Mirvac and the Australian Government. Location: Show Floor						
10:30am	KN03 - Maximising your ROKLive Experience Presenters: Kevin Cole, Territory Manager, Rockwell Automation / Mike Massey, Manager, Market Access, Rockwell Automation Australia & New Zealand Location: Show Floor						
10:45am	Morning Tea						
Time	Transform	Explore	Imagine	Design	Operate	Maintain	Innovate
11:00am	DX01	OM22	CS08	DE16	OM27	PA06	SS25
	Surviving your digital transformation journey	MES: The Value of a Cloud Solution to Drive Digital Transformation	Improve Your Control System Defense-in-Depth Security with CIP Security				
12:00pm	DX02	ME01	CS09				
	Upgrading your critical control system for the future	Revolutionise Your Operations with a Modern Maintenance Program	Understand the Effect of CIP Security on Your Control System				
1:00pm	Lunch						
1:45pm	DX03	IN17	OM23	IV08	IN16	VZ11	SD24
	Ensuring value from new technology adoption	Fluke Networks: Identifying, Solving and Preventing Industrial Ethernet Cabling problems	Driving Continuous Improvement with Plex Systems Production Monitoring				
2:45pm	DX04	MC21	OM28				SD25
	Securing critical infrastructure against Cybercrime	Challenging Drive Applications	Smart Instrumentation - finally delivering on the promise with IIOT				
3:45pm	Afternoon Tea						
4:00pm	DX05	IN09	SD10	VZ12	PA02	PA03	SD21
	Leveraging powerful Edge capabilities in your Digital Solutions	Five Simple Ways SaaS Cloud Technology Will Help Transform How You Work	Endress+Hauser: Smart Instruments, the foundation for digitalization				
5:00pm	DX06	IV10	OM24			DE15	
	Setting the course for digital manufacturing in food and beverage	NHP: Smart Power distribution for critical Infrastructure	FactoryTalk Energy Manager: A Scalable Approach to Energy Monitoring in Context to Production				
6:00pm	Welcome Drinks - Food Trucks and Live Band (Allen and the Bradleys)						

DAY 2 – Wednesday, 2nd March

Time	Description						
8:30am	Registration Open						
Time	Transform	Explore	Imagine	Design	Operate	Maintain	Innovate
9:00am	IV09 - Location: Show Floor						
	What's New from Rockwell Automation						
10:00am	Morning Tea						
10:15am	DX07	SS06	PR01	IV06	IN16	VZ11	MC24
	Creating strategic business value by unlocking organisational data through advance analytics	Introduction to Machine Risk Assessment and Functional Specification Development	What's New and Next for the PlantPax® DCS	Notifications and Taking Action using IoT Data using FactoryTalk® InnovationSuite	Basic Stratix® Switch and EtherNet/IP Features in Converged Plantwide Ethernet Architectures	Designing Machine-level HMI with PanelView™ 5000 and Studio 5000 View Designer®: Basic Lab	Variable Frequency Drives Installation Best Practices and EMC Cabling Demonstration
11:15am	DX08	SS10	PR02				
	Pavilion8 – Model Predictive Control in Mining Operations	Designing a Safe Motor Control System	Defining and Sizing PlantPax® Systems: Best Practices and What's Next				
12:15pm	Lunch						
1:00pm	DX09	IN15	PR17	PA04	VZ10	PA03	SD24
	Why companies fail with their digitalisation projects, and how to break through the barriers to success.	Building Converged Plantwide Ethernet Architectures	How to address Industry Challenges with a Scalable Process Control System	FactoryTalk® AssetCentre: Basic / Advanced Lab	Implementing FactoryTalk® Alarms and Events	Next Gen I/O: Hands-on with Flex 5000	Motor Protection using Electronic Overloads
2:00pm	DX10	DE11	PR03				
	Digitalisation delivered. Improving efficiency and reducing waste for a multinational manufacturer.	Overview of Virtual Commissioning Using Emulate3D™ Software	Smart Instrumentation – finally delivering on the promise with IIOT		Controller Emulation Using actoryTalk® Logix Echo: Hands-on Lab	Motor and Asset Protection using Vibration Monitoring	
3:00pm	Afternoon Tea						
3:15pm	DX11	SS02	PR07	PR16	PA05	PA06	ME02
	Turning your control system into a competitive advantage	Right-Size Your Safety Control System to Better Manage a More Sustainable Business	FactoryTalk® InnovationSuite for Process Control in PlantPax® DCS 5.0	PlantPax 5.0, New Controller and Applications Development	Using FactoryTalk® Linx, OPC UA and KEPServer Enterprise Comms for FactoryTalk® and 3rd party software.	ThinManager® Experience the Platform's Power and Simplicity: Basic Lab	Fiix: Hands-on experience with our latest cloud based CMMS
4:15pm	DX12	SS08	IV07				
	Environmental, Social and Corporate Governance: MMC Industry Challenges and Actionable Solutions to Achieve Ambitious Goals	Safety Automation Architectures - What's New & What's Next	Quality and Production Management with FactoryTalk® InnovationSuite				Working with Smart MCCs
5:15pm	Day 2 close						
6:00pm - 9:30pm	Dinner at Waterview in Bicentennial Park Sponsored by NHP Electrical Engineering Products the sole distributor for Rockwell Automation in Australia and New Zealand						

DAY 3 - Thursday, 3rd March

Time	Description					
8:30am	Registration Open					
Time	Explore	Imagine	Design	Operate	Maintain	Innovate
9:00am	MC23	PA01	PR18	PA02	DE14	SD24
	Handling Harmonics and Power Factor Considerations with Drives	Integrated Architecture® System Software - What's New in Studio 5000 including the latest emulation software Echo.	Leveraging PlantPAX to simplify the integration of VSDs, intelligent motor protection, and electrical components	Studio 5000 Logix Designer: Advanced Hands-on Lab	Controller Emulation Using FactoryTalk® Logix Echo: Hands-on Lab	Motor Protection using Electronic Overloads
10:00am	SS12	VZ02			MC13	SD25
	Introduction to Implementing Security in Industrial Control System Applications	How to Improve Plant Operations through Better HMI Graphics			Electrical Standards Update	Motor and Asset Protection using Vibration Monitoring
11:00am	Morning Tea					
11:15am	SS03	OM17	DE13	PR15	PA03	SS25
	Are You Challenged by the Demanding Safety Requirements for Your Fail-Safe Applications?	Machine Learning Options from Edge to Cloud	Virtual Commissioning Using Emulate3D Software: Hands-on Lab	Introduction to the PlantPAX® 5.0 DCS for Operations and Maintenance	Next Gen I/O: Hands-on with Flex 5000	Smart Safety Systems: Hands-on Lab
12:15pm	CS10	IN14			SD12	
	Continuous Threat Detection	Fundamentals of EtherNet/IP IIoT Network Technology			Working with Smart MCCs	
1:15pm	Lunch					
2:00pm	SS11	OM26	PA07	IN16	VZ11	SD21
	Safe Position and Speed Monitoring – real world application of advanced safety technology	Collect and organise data with improved context using FactoryTalk® Edge Gateway	Design for Micro Control Systems with Connected Components Workbench Software	Basic Stratix® Switch and EtherNet/IP Features in Converged Plantwide Ethernet Architectures	Designing Machine-level HMI with PanelView™ 5000 and Studio 5000 View Designer®: Basic Lab	Simplifying Integration and Maintenance of Drives
3:00pm	OM25	SS01				
	FactoryTalk® System Design Overview	Functional Safety Standards and the Changing Compliance Landscape				
4:00pm	Day 3 - Event Close					

Sessions

Session Tracks Legend

	KEYNOTE		INDUSTRIAL NETWORKS		PRODUCTION AUTOMATION
	CYBERSECURITY		MAINTENANCE EVOLUTION		SAFETY SOLUTIONS
	DIGITAL ENGINEERING		MOTOR CONTROL		SMART DEVICES
	DX STRATEGISTS		OPERATIONS MANAGEMENT		VISUALIZATION
	INDUSTRIAL INNOVATIONS		PROCESS		

 Denotes Lab Sessions

Session Descriptions

KEYNOTE

Session Code	Title	Description
KN01 Day 1 - 45mins	Bringing the Connected Enterprise to Life Presenter: Anthony Wong, Regional Director, South Pacific Regions, Rockwell Automation	Anthony Wong will officially open ROKLive 2022 and talk through how businesses are progressing on their digital journey in the face of disruption. Hear why now is the time for companies to make bold moves to thrive in a competitive future.
KN02 Day 1 - 45mins	World War Data: How Data, Analytics & AI Will Dominate the Business Battleground of the Future Presenter: Stephen Scheeler	Stephen Scheeler is the former Facebook CEO for Australia and New Zealand, where he guided Facebook's unprecedented rise from quirky Silicon Valley start up to media and technology titan. Working with Mark Zuckerberg, Sheryl Sandberg and Facebook's Silicon Valley leaders, his time at Facebook saw the Australia and New Zealand business grow from mere start up into one of the most successful Facebook markets in the world. Today he is CEO of Omniscient, a company aiming to radically change the care of patients with brain disease by turning loose Machine learning/AI and big data to provide useful information to doctors. In this keynote, Stephen will talk about digital disruption today and making sense of complex data for real results.
KN03 Day 1 - 15mins	Maximising your TechED Experience Presenters: Mike Massey / Kevin Cole	Presenters Mike Massey and Kevin Cole walk you through what you need to know to get the most out of your ROKLive experience.

CYBERSECURITY

Session Code	Title	Description
CS08 Day 1 - 1hr	Improve Your Control System Defense-in-Depth Security with CIP Security	Help your devices to protect themselves from malicious attacks focusing on authenticity, integrity and confidentiality with CIP Security. This session explores how introducing additional security measures can impact your control system performance and operational productivity. (This is part 1 of a 2 part session. Second session is CS09)
CS09 Day 1 - 1hr	Understand the Effect of CIP Security on Your Control System	Introducing security to the plant-floor is often being perceived as difficult and disruptive, but it's not. This session includes a demonstration of how modern software and innovative hardware can bring network security to your control system and discusses the practical aspects of control system security policy management. (This is part 2 of a 2 part session. CS08 is a pre-prerequisite)
CS10 Day 3 - 1hr	Continuous Threat Detection	Cybersecurity is the 'new black' in our industrial automation space. Mixing new technology with legacy systems creates the perfect environment for a cyberattack. We need to have a multi-tiered approach to keep our people, plants and operations safe from imminent threats. Attend this session to understand our new services offers in this space as well as the multi-tiered approach, Rockwell can assist you to embed in your operations.

DIGITAL ENGINEERING

Session Code	Title	Description
DE11 Day 2 - 1hr	Overview of Virtual Commissioning Using Emulate3D™ Software	Design and build faster and more efficiently, with FactoryTalk® Logix Echo emulation software for ControlLogix® 5580 controllers. Save time and money through every stage of a project: initial prototyping and design, testing and evaluation, and production and installation. Take the next step towards comprehensive digital engineering. mechanical, and control systems as well as the role simulation plays in delivering design insights earlier. Ever dream of being able to develop and debug control code before the piece of equipment to be automated is even built? Join this session and see exactly how this can be done by connecting your programmable automation controller to a 3D digital model of the equipment using Emulate3D™ software. You will see how simulation can help reduce investment risks, improve time to market and increase understanding and how virtual reality can extend that understanding into a fully immersive experience.
DE13 Day 3 - 2hrs	Virtual Commissioning Using Emulate3D Software: Hands-on Lab	Emulate3D simplifies your control logic testing. This lab will let you experience how Emulate3D can be used to develop, test and produce robust PLC and mid-level control systems offline, before building the real system. By using a 3D model to provide realistic feedback in place of the real automated system, operator training can be safer, less expensive and does not disrupt existing production.
DE14 Day 2 - 1hr Day 3 - 1hr	Controller Emulation Using FactoryTalk® Logix Echo: Hands-on Lab	Design and build faster and more efficiently, with FactoryTalk® Logix Echo emulation software for ControlLogix® 5580 controllers. Save time and money through every stage of a project: initial prototyping and design, testing and evaluation, and production and installation. Take the next step towards comprehensive digital engineering. fed directly into the where it can be used the most. Learn what the system can do, how it does it, and how you can apply it to real world applications including machinery protection, quality and predictive maintenance.
DE15 Day 1 - 1hr	Assisted Reality, Real Time Access and Hands Free Wearable Computers	Join us to learn how hands-free wearable computers can enable front line workers with access to the right information, when and where needed, while safely maintaining situational awareness. RealWear will discuss how we aim to develop "Assisted Reality" in areas such as guided access to technical documentation and digital assets, video micro-learning, IIoT data visualization, and smart annotation to impact work in meaningful ways.
DE16 Day 1 - 2hrs	Studio 5000® Application Code Manager Project Execution and Library Management	Quickly build your automation projects using the Rockwell Automation Application Code Manager. This lab will provide you the opportunity to create project content by selecting library objects (control modules, equipment's modules, etc.) and providing configuration data, such as object name and description (i.e. V100, Tank 100 Inlet Valve), equipment setpoints, control interlocks, conditional inclusion (i.e. has diagnostics), etc. Once all the configuration, not programming, is provided you will initiate a project build (ACD file) that you will be able to download to a controller to run. In addition, this lab will provide you the opportunity to create a new library object that includes Logix, FactoryTalk® View SE, FactoryTalk® Historian and FactoryTalk® Alarms and Event content. Work with ACM Library Designer and Library Object Manager to build and publish library objects into the ACM database. Create highly parameterized library objects for modular reuse and flexibility.

DX STRATEGISTS		
Session Code	Title	Description
DX01 Day 1 - 1hr	Surviving your digital transformation journey	In this sessions we will discuss the need to coordinate and prioritise the many independent threads of digital transformation from the influence from other strategies such as business, functional and data to the role of stakeholder engagements and enabling technologies. We will explore how the various business drivers, objectives and technology impact the success of digital transformation and the execution of the digital strategy.
DX02 Day 1 - 1hr	Upgrading your critical control system for the future	SAGE Automation recently worked with a local electricity generation and retailing company to deliver a control system for the future. As a critical infrastructure the upgrade demanded a highly resilient and diagnosable system. SAGE Automation worked closely with Rockwell Automation to deploy a fault tolerant solution monitored by a remote-control centre for rapid fault identification and response. Join this session to learn more about modernising your critical control system for the future.
DX03 Day1 - 1hr	Ensuring value from new technology adoption	Technology adoption has long been a concern of business leaders. Whether it's a new CRM system, an updated ERP system, or, in the case of Products for Industry and CEO Gavin Dunwoodie, a foray into manufacturing digital twin software (Emulate3D), there are always risks. However, if integrated and invested in properly, these technology solutions can create value that outweighs the risk many times over. Join Rockwell and Products for Industry as we delve into how business leaders should be thinking about launching next level tech into their businesses.
DX04 Day 1 - 1hr	Securing critical infrastructure against Cybercrime	In this session, Rockwell and Cisco will talk through how experts are securing the nation's critical infrastructure assets for Cyber resilience. They will touch on why this has become one of Australia's greatest challenges and is critical to the nation's economic prosperity and security as well as open audience conversations around best practices and real-world examples.
DX05 Day 1 - 1hr	Leveraging powerful Edge capabilities in your Digital Solutions	Successful IIoT initiatives enable both IT and OT domain experts to take advantage of machine learning and visual data pipelines. For OT, capabilities exist today that enables analytic models to be trained, scored and executed at the intelligent edge. Join experts from Rockwell and PTC for this session.
DX06 Day 1 - 1hr	Setting the course for digital manufacturing in food and beverage	Learn how food and beverage industry leaders found innovative ways to leverage technology and digital strategies to improve their performance, overcome security concerns, manage remote work and meet consumer demands.
DX07 Day 2 - 1hr	Creating strategic business value by unlocking organisational data through advance analytics	This session will explore how companies are leveraging analytics, machine learning and artificial intelligence to create business values and achieve sustainable growth. We will examine how digital natives companies have achieved this and discuss the opportunities for accelerating digital transformation.
DX08 Day 2 - 1hr	Pavilion8 - Model Predictive Control in Mining Operations	Rockwell Automation recently partnered with a global mining client to implement our Pavilion8 Advanced Process Control platform in one of their operations in Australia. Join this session to learn about the journey from initial problem statement and study phase, through to implementation and operations, providing a step change in operational efficiency through reductions in variability.

DX STRATEGISTS

Session Code	Title	Description
DX09 Day 2 - 1hr	Why companies fail with their digitalisation projects, and how to break through the barriers to success.	Almost every industrial company is looking to 'digitalise', and while some have seen demonstrable and resounding success, many others get stuck in 'pilot purgatory' and fail. This session will look at some of the reasons digital transformation gets stuck and how to successfully negotiate through these challenges.
DX10 Day 2 - 1hr	Digitalisation delivered. Improving efficiency and reducing waste for a multinational manufacturer.	Rockwell and our IIoT partner ATSYS recently implemented a performance monitoring platform across the ANZ sites of a major packaging manufacturer. The technology platform, along with ATSYS's IIoT expertise, enabled a rapid and agile discovery to implementation approach - resulting in immediate gains in capacity, reliability, and waste. The standardised data platform is now enabling ATSYS to deploy additional apps targeting further incremental plant improvements.
DX11 Day 2 - 1hr	Turning your control system into a competitive advantage	It's not uncommon to be stuck with the increasing cost and low reliability of an obsolete and aged DCS. In this session, we will look through the lens of a global O&G player's direct experience in upgrading their process plant for the future. Rockwell Lifecycle Services, together with the incumbent Solutions Provider worked with this client to reduce the production risk of obsolescence and to improve performance and reliability of their operations.
DX12 Day 2 - 1hr	Environmental, Social and Corporate Governance: MMC Industry Challenges and Actionable Solutions to Achieve Ambitious Goals	Top companies in the mining, metals and cement industries are increasingly focused on Environmental, Social and Corporate Governance (ESG). ESG analysis and reporting can provide valuable insights that create long-term value for stakeholders. It's becoming more and more clear that decisions made based on ESG analysis and reporting have the potential to significantly impact financial metrics of a company. This moderated panel discussion will include engaging conversation on the panelists' experiences with ESG, roadblocks they anticipated and the solutions available to mitigate these risks.

INDUSTRIAL INNOVATIONS

Session Code	Title	Description
IV06 Day 2 - 2hrs	Notifications and Taking Action using IIoT Data using FactoryTalk® InnovationSuite	Providing operators, managers and engineers with relevant and timely information regarding operational status of their equipment is fundamental in achieving efficient, world-class operations. In this lab, you will learn about the various techniques used to notify users of various situations that require immediate action. You will leverage ThingWorx and ThingWorx Flow in order to generate notifications. Don't wait for things to happen - take action!
IV07 Day 2 - 1hr	Quality and Production Management with FactoryTalk® InnovationSuite	Product tracking and manual data collection are key aspects to a complete quality management picture. This session will demonstrate how the Quality and Production Management Fit for Purpose Apps within FactoryTalk InnovationSuite can provide operator and product context through a single system to improve quality, compliance and productivity.
IV08 Day 1 - 2hrs	Simplify the Adoption of Industrial Machine Learning with Thingworx Analytics	Come and join this lab to understand how fast you can implement predictive model using Thingworx Analytics and generate benefits for your industry, without requiring complex programming, complex Data Science knowledge by using the auto-ML features of Thingworx platform.

INDUSTRIAL INNOVATIONS

Session Code	Title	Description
IV09 Day 2 - 1hr	What's New from Rockwell Automation	Get the inside scoop on the latest hardware and software releases from Rockwell Automation. This session covers the newest Rockwell Automation and Allen-Bradley® products and FactoryTalk® software, our latest acquisitions and much more.
IV10 Day 1 - 1hr	Smart Power distribution for critical Infrastructure	This session will be addressing how the advances in SMART power distribution technologies can improve safety for people whilst maximising power availability and reliability.

INDUSTRIAL NETWORKS

Session Code	Title	Description
IN09 Day 1 - 1hr	Five Simple Ways SaaS Cloud Technology Will Help Transform How You Work	We're accelerating our cloud vision and we want you to join us! Discover how to achieve results faster and easier with FactoryTalk® Hub™ simplifying system design, operation and maintenance so you can work smarter and more efficiently toward your goals.
IN14 Day 3 - 1hr	Fundamentals of EtherNet/IP IIoT Network Technology	This discussion will review the capabilities and features of EtherNet/IP, including an overview of networking technology and terminology. Learn how the Common Industrial Protocol (CIP) fully uses the Open Systems Interconnection (OSI) 7-layer reference model and enables the Industrial Internet of Things (IIoT).
IN15 Day 2 - 1hr	Building Converged Plantwide Ethernet Architectures	Learn the importance of using reference architectures to build scalable, reliable, safe, secure and future-ready network architectures. This discussion provides an overview of the CPwE architectures, why they're important, what's new and how these architectures combined with products, services and solutions support successful deployment of The Connected Enterprise. A prior understanding of general Ethernet concepts, or attendance of the Fundamentals of EtherNet/IP IIoT Network Technology session is recommended.
IN16 Day 1 - 2hrs Day 2 - 2hrs Day 3 - 2hrs	Basic Stratix® Switch and EtherNet/IP Features in Converged Plantwide Ethernet Architectures	Get hands-on experience integrating Stratix switches and EtherNet/IP devices into your plant network to improve reliability, manageability and overall ease of use. You will become familiar with Stratix 5700 switch hardware features, management and diagnostics tools such as Device Manager, Studio 5000 environment Add-On Profiles (AOP), FactoryTalk View software faceplates and see configuration and diagnostics of a Device Level Ring (DLR) topology. tools such as Device Manager, Studio 5000 environment Add-On Profiles (AOP), FactoryTalk View software faceplates and see configuration and diagnostics of a Device Level Ring (DLR) topology.
IN17 Day 1 - 1hr	Identifying, Solving and Preventing Industrial Ethernet Cabling problems	Over half of all Industrial Ethernet outages are directly related to the cabling infrastructure. This presentation looks at identifying and troubleshooting IE cabling problems including preventive guidelines from Rockwell Automation and Fluke Networks.

MAINTENANCE EVOLUTION

Session Code	Title	Description
ME01 Day 1 - 1hr	Revolutionize Your Operations with a Modern Maintenance Program	Modern, cloud-based computerized maintenance management systems (CMMS) are helping maintenance and operations teams get organized, crush their goals and scale faster. Learn how a CMMS can help you stay on top of day-to-day maintenance operations and automatically trigger work on the plant floor.
ME02 Day 2 - 1hr	Fiix: Hands-on experience with our latest cloud based CMMS	In this lab you will get hands on experience enabling you to set up, run, and be successful with Fiix. Learn how to organize assets, schedule work orders, capture data, report on your team's progress, and more.

MOTOR CONTROL

Session Code	Title	Description
MC13 Day 3 - 1hr	Electrical Standards Update	Changes have been made to AS/NSZ 3000 and how it relates to AS/ NZS 61439. This session will cover how those changes may affect future installs and how the CENTERLINE 2500 LV MCC complies with the latest requirements.
MC21 Day 1 - 1hr	Challenging Drive Applications	Get well beyond the world of simple pump and fan applications, and understand why PowerFlex drives have 2000 in-built parameters. Discover some of the more challenging and interesting applications that have been done recently using PowerFlex drives. You will gain insight into the high-end capabilities of the product.
MC23 Day 2 - 1hr	Handling Harmonics and Power Factor Considerations with Drives	With the majority of modern age equipment now utilising integral power supply technology which continuously chops the AC waveform, harmonics are becoming a wide spread issue. Symptoms of false tripping of circuit breakers, electrical distribution assets and cables running at high temperatures and becoming overloaded, dangerously high Neutral currents, and premature equipment failure could all be the result of harmonics distortion.
MC24 Day 2 - 2hrs	Variable Frequency Drives Installation Best Practices and EMC Cabling Demonstration	Variable frequency drive installation can be quite specialized. Part one of this two part session will cover best practices in installation, with examples drawn from TechSupport cases where the installation was contributing to drive faults. The second part is a live demo to illustrate the importance of good EMC cabling practice in VSD installations.

OPERATIONS MANAGEMENT

Session Code	Title	Description
OM17 Day 3 - 1hr	Machine Learning Options from Edge to Cloud	Predictive maintenance is not a thing of the future, it is possible today and can take many forms. Rockwell Automation has many solutions that utilize machine learning in a device, or as part of a platform to provide predictive and prescriptive maintenance information to reduce downtime and improve performance. Tune into this session to learn more about these innovations.
OM22 Day 1 - 1hr	MES: The Value of a Cloud Solution to Drive Digital Transformation	Explore the capabilities of Plex MES - the newest member of the Rockwell Automation portfolio of industrial solutions. This battle-hardened, cloud-native SaaS-based manufacturing solution can help you transform your operation and overcome today's labour and supply chain challenges. Learn how this solution can make you more agile through quick deployment, accessible data, innovative and automation features and faster ROI.

OPERATIONS MANAGEMENT

Session Code	Title	Description
OM23 Day 1 - 1hr	Driving Continuous Improvement with Plex Systems Production Monitoring	Optimizing production efficiency and continuous improvement are critical to manufacturing success. Doing it well means collecting accurate data, in real time, in a way that allows people to easily act on it with solutions that are fast to implement, flexible to tailor and deliver straightforward dashboards. Plex Production Monitoring is one of a suite of applications that provides seamless connectivity to machines on the plant floor, delivering transparent, real-time operational KPIs to drive continuous improvements.
OM24 Day 1 - 1hr	FactoryTalk Energy Manager: A Scalable Approach to Energy Monitoring in Context to Production	The 2020 Deloitte and Manufacturers Alliance for Productivity and Innovation Smart Manufacturing Ecosystems Study identified that 80% of manufacturers surveyed are investing in plant consumption and energy management use cases for the smart factory. Join this session for an in-depth overview of the benefits and capabilities of FactoryTalk® Energy Manager and how our design can enable customers to establish the required connectivity, scale and outcome-based impact to achieve their digitization and sustainability goals.
OM25 Day 3 - 1hr	FactoryTalk® System Design Overview	This session is a high-level overview of best practices when architecting a FactoryTalk® system. FactoryTalk® components covered will include the FactoryTalk® Services Platform, View SE, AssetCentre, Historian SE, and VantagePoint. Please have a basic knowledge of how controller design and network design affect a FactoryTalk® system. Some application-level recommendations will be discussed, but will not be the focus of the session.
OM26 Day 3 - 1hr	Collect and organise data with improved context using FactoryTalk® Edge Gateway	Industrial data is generated in such volumes and high speeds from disparate devices that it's difficult to capture accurately and is time consuming to extract actionable industrial insights. FactoryTalk® Edge Gateway™ software addresses these challenges, unlocking plant and enterprise-level understandings. It simplifies and automates collection, contextualization, and organization of industrial equipment data across machines, devices and automation assets at the source itself—enabling high data integrity from the outset. It provides the right foundation to drive edge-to-cloud IT/OT convergence at the enterprise level so that everyone from the shop floor to the top floor can make smarter decisions.
 OM27 Day 1 - 2hrs	Deliver Meaningful Information at the OT Level with FactoryTalk Edge Gateway and FactoryTalk Smart Objects	Utilize FactoryTalk® Edge Gateway to organize and present contextualized control system data from multiple sources to enterprise-wide databases and dashboards. Explore how control system engineers can utilize FactoryTalk® Smart Object's high-speed synchronous data collection capabilities in Logix controllers to solve advanced analytic use cases.
OM28 Day 1 - 1hr	Scalable Asset Inventory Management: There's Got To Be a Better Way	While critical to operations, asset management can be a costly and never-ending task. Our Asset Inventory Manager application provides a central repository with an enterprise-wide view of control system assets by integrating automated inventory agents, offline files and inventory data (plus lifecycle information!). See how this scalable solution can help boost your productivity.

PROCESS		
Session Code	Title	Description
PR01 Day 2 - 1hr	What's New and Next for the PlantPax® DCS	Discover the latest updates with the newly released PlantPax® DCS 5.10. This session discusses how this modern plant-wide approach that scales from skids to large operations provides actionable information for data driven decision-making across your enterprise. Learn how this will help streamline projects and reduce engineering efforts.
PR02 Day 2 - 1hr	Defining and Sizing PlantPax® Systems: Best Practices and What's Next	Proper use of the PlantPax® System Estimator helps ensure your system is designed for optimal performance. In this session you will learn about the latest tools, capabilities and guidelines provided by Rockwell Automation to help you define and size the appropriate PlantPax® system architecture based on your project requirements. We will review the latest system and architecture rules, as tested in our characterization lab. We'll also examine capabilities offered in the PlantPax® System Estimator including MCC integration and advanced sizing features to help you carry out and confirm proper sizing for new systems as well as system expansions. You will also get a preview of upcoming features that will provide you more flexibility to define and size systems for a wider range of system requirements.
PR03 Day 2 - 1hr	Implementation of PlantPax® Systems: Best Practices and What's New	Engineering efficiency and consistent delivery are key topics for implementing any DCS successfully. Learn how to bring the Rockwell Automation® Modern DCS to the market faster using the latest capabilities and guidelines for implementing a system including the newly introduced graphic framework. This session will cover tools such as bulk-editing of library code and control strategies of common process functions. We will also cover system-wide functionality such as the integration of alarming and the ability to display information with contextual relevance.
PR07 Day 2 - 1hr	FactoryTalk® InnovationSuite for Process Control in PlantPax® DCS 5.0	Learn how the newly released Rockwell Automation PlantPax® DCS 5.0 release will enable FactoryTalk® InnovationSuite to bring to life live and historical data with feature-rich dashboards, PTC process templates and advanced analytics. Through demonstrations, you will see how PlantPax® 5.0 can be utilized within Vuforia® and how control strategy within an augmented reality can simulate actionable faults and analytics.
PR15 Day 3 - 2hrs	Introduction to the PlantPax® 5.0 DCS for Operations and Maintenance	This lab examines the PlantPax® 5.0 DCS within simulated plant environments through the eyes of operations and maintenance. As an operator, you will learn about navigating and interfacing within the PlantPax HMI framework while operating a simulated reactor focusing on control of pumps, valves, and sequences using PlantPax library faceplates. Next, explore the and run a simulated waste water application while using the new PlantPax 5.0 Equipment Modules (Ems). Rockwell provides a free library of process strategies using the Rockwell Automation® Library of Process Objects that can be used to quickly develop new process applications or make changes to existing systems, as you will see in this lab. This session provides basic familiarity with the PlantPax® system software along with the new Process Controller to get a real world feel for what will be available in PlantPax 5.0.
PR16 Day 2 - 2hrs	PlantPax 5.0, New Controller and Applications Development	This lab will familiarize the user with the new Process Controller and the PlantPax™ 5.0 library. The lab covers the steps necessary to start development of a PlantPax 5.0 DCS project using the Rockwell Automation Library of Process Objects 5.0 and the new workflow with Embedded Objects and Logix Designer Dialog Boxes. The user will configure a controller and HMI application with pre-defined library routines and global objects. The lab also introduces new features such as 5.0 tag-based alarms, the new Highly Integrated HART, and configuring the new Ownership and Organization model and faceplates.

Sessions

PROCESS

Session Code	Title	Description
PR17 Day 2 - 1hr	How to address Industry Challenges with a Scalable Process Control System	One of Rockwell Automations strengths in process applications is the ability for solutions to scale. Modern control systems come in a number of sizes from large plants with many thousands of IO, or small modular skid based applications. In this session we will discuss suitable architectures for Small, Medium and Large process applications and highlight a number of toolsets and technologies that can lower risk, simplify deployment, and reduce engineering time.
PR18 Day 3 - 2hrs	Leveraging PlantPAx to simplify the integration of VSDs, intelligent motor protection, and electrical components	Lowering engineering cost and reducing risk are always key drivers when selecting a Process Control solution. This interactive demonstration will highlight how standard functionality within PlantPAx, our Modern DCS, allows integration of variable speed drives, motor protection modules and electrical devices directly into the platform, reducing project complexity, cost, and risk. Additionally, this seamless integration improves operations by automatically providing deeper diagnostics, as well as data for predictive analytics.

PRODUCTION AUTOMATION

Session Code	Title	Description
PA01 Day 3 - 1hr	Integrated Architecture® System Software - What's New in Studio 5000 including the latest emulation software Echo.	Discover the latest developments in Studio 5000 and the FactoryTalk software suite. This session will show how new capabilities can help you reduce engineering time, enable access to real-time information and increase operator effectiveness.
PA02 Day 1 - 2hrs Day 3 - 2hrs	Studio 5000 Logix Designer: Advanced Hands-on Lab	So you've got the basics, now let's take it to the next level with this advanced Logix session. This pick-and-choose lab will allow you to explore topics of interest and quickly see how capabilities add the most value to your design. By the end of this session, you will be on your way to becoming an expert.
PA03 Day 1 - 1hr Day 2 - 1hr Day 3 - 1hr	Next Gen I/O: Hands-on with Flex 5000	Delivering value with our 5000 series I/O platform technology: Discover FLEX 5000 I/O and how to implement an integrated control and safety systems that are TÜV certified for use in fail-safe applications. We will also explore the use of the highly integrated Hart functionality available exclusively with Flex5000 Hart Modules.
PA04 Day 2 - 2hrs	FactoryTalk® AssetCentre: Basic / Advanced Lab	Pick & choose basic or advanced FactoryTalk AssetCentre lab. Beginners will learn about the core functionality of FactoryTalk AssetCentre in a hands-on environment, how to interact with the FactoryTalk AssetCentre application, as well as how to design the foundation of a successful asset management system. Advanced users will learn what's new with Asset Inventory Agent and lifecycle management, using the new Import/Export tool for accelerated deployment, capturing and reporting on diagnostics from FactoryTalk View, version control of project files, designing a security model, and configuration and implementation of a disaster recovery strategy.
PA05 Day 2 - 2hrs	Using FactoryTalk® Linx, OPC UA and KEP-Server Enterprise Comms for FactoryTalk® and 3rd party software.	Brief introduction to new capabilities combined with hands-on lab working directly with FactoryTalk® Linx and KEP-Server Enterprise software to access various forms of control system data. Experience new capabilities to increase your productivity, secure access, enhance systems availability and work with OPC UA interfaces.

Sessions

PRODUCTION AUTOMATION

Session Code	Title	Description
PA06 Day 1 - 2hrs Day 2 - 2hrs	ThinManager® Experience the Platform's Power and Simplicity: Basic Lab	This lab introduces the primary building blocks of the ThinManager® platform while demonstrating its ease of use and flexible content delivery options within a FactoryTalk® environment. This session includes hands-on training with the latest Rockwell Automation® industrial grade box thin client, the VersaView® 5200. also explore the use of the highly integrated Hart functionality available exclusively with Flex5000 Hart Modules.
PA07 Day 3 - 2hrs	Design for Micro Control with Connected Components Workbench™ Software	Experience basic programming of a Micro800™ controller. Learn Connected Components Workbench™ software capabilities such as similar workflows to RSLogix 500® and Studio 5000 Logix Designer® applications, instruction library toolbar and Logix theme programming environment. Discover how to develop and test programs with the Micro800™ Simulator. Plus, see your digital engineering lab come to life via a virtual bottle filling machine.

SAFETY SOLUTIONS

Session Code	Title	Description
SS01 Day 3 - 1hr	Functional Safety Standards and the Changing Compliance Landscape	This session will introduce you to functional safety standards and requirements that apply to automation equipment. Many are driven by the European Machinery Directive but are globally accepted. Understand the range of safety standards, their application, assignment of risk and Performance Levels, and tools available to help calculate machinery safety data.
SS02 Day 2 - 1hr	Right-Size Your Safety Control System to Better Manage a More Sustainable Business	Discover how the key advantages of a Compact GuardLogix® 5380 safety architecture can help you design the right-sized system through scalability, premier integration with other safety products, comprehensive safety-rated instruction set and more. Learn how Rockwell Automation® safety solutions are deployed in various applications.
SS03 Day 3 - 1hr	Are You Challenged by the Demanding Safety Requirements for Your Fail-Safe Applications?	Meeting safety requirements where discrete and analog fail-safe I/O is needed, the FLEX 5000™ product family can help you: Optimize productivity due to faster reaction time, gain insight to extensive diagnostics, simplify design with fixed field-wiring terminations and save installation costs by mounting the I/O vertically or horizontally. Discover the wide breadth of offering available to address your safety application requirements.
SS06 Day 2 - 1hr	Introduction to Machine Risk Assessment and Functional Specification Development	Risk assessments are the basis for determining risks and corresponding mitigation. By properly identifying risks, more effective and suitable methods of safeguarding measures can be implemented. This session will showcase the process of performing plant-wide audits and machinery risk assessments, and use of available tools to streamline the process.
SS08 Day 2 - 1hr	Safety Automation Architectures - What's New & What's Next	A number of new products have emerged this year improving the flexibility, scalability, and productivity of safety systems. This session will showcase new products and applications including integrated controllers, distributed and in-chassis safety I/O, and components.
SS10 Day 2 - 1hr	Designing a Safe Motor Control System	This presentation discusses how to use a risk assessment to assign a Performance Level (PL), develop a Safety Requirements Specification, and design the safety related parts of the control system (SRP/CS).

SAFETY SOLUTIONS

Session Code	Title	Description
SS11 Day 3 - 1hr	Safe Position and Speed Monitoring – real world application of advanced safety technology	Explore real-world advanced safety applications and how innovative machine design can dramatically improve productivity. Minimizing lock-out/tag-out downtime with alternative measures – including safe position and speed monitoring – can help protect workers and improve productivity.
SS12 Day 3 - 1hr	Introduction to Implementing Security in Industrial Control System Applications	In this session, you will learn the basic security functions you can use today to start optimising 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.
SS25 Day 1 - 2hrs Day 3 - 2hrs	Smart Safety Systems: Hands-on Lab	Intelligent devices help improve insight into machinery operation and worker behaviors, while providing feedback on system operation to help reduce downtime. In this lab, you'll learn programming of safety devices, design requirements for integrating additional CIP Safety enabled devices, and the impact to the safety integrity of the system.

SMART DEVICES

Session Code	Title	Description
SD10 Day 1 - 1hr	Smart Instruments, the foundation for digitalization	Successful digital transformation projects need to start with accurate and reliable data from instrumentation in the field. This data, combined with the latest capabilities will help you improve plant operations, reduce disruptions and increase operator confidence.
SD12 Day 2 - 1hr Day 3 - 1hr	Working with Smart MCCs	In this instructor led demo you will learn how to speed up integration and reduce energy usage with Ethernet-enabled MCCs, Studio 5000™ and IntelliCENTER® software. Experience the ease of integrating CENTERLINE® Motor Control Centers (MCCs) with their associated components – PowerFlex drives and E300 overload relays. See how, with a click of the button, the new IntelliCENTER Integration Assistant populates the Studio 5000™ I/O tree, simplifying device configuration and reducing commissioning time and errors. In addition this session also includes a walk around of a CENTERLINE 2500 MCC.
SD21 Day 1 - 2hrs Day 3 - 2hrs	Simplifying Integration and Maintenance of Drives	Learn how to incorporate Allen Bradley devices into your Ethernet network simply and efficiently. Demonstrating the time-saving capabilities of Premier Integration and device control, along with how you can rapidly recover from downtime events.
SD24 Day 1 - 1hr Day 2 - 1hr Day 3 - 1hr	Motor Protection using Electronic Overloads	Electric motors are the backbone to today's industry, providing the mechanical energy needed for most manufacturing processes. From time to time, there may be instances where a motor may fail because of improper wiring, an electrical issue, a mechanical anomaly or internal motor damage. When an unplanned event like this occurs, how does your facility handle the situation? Anytime a critical motor unexpectedly stops your process, what's the revenue cost of this lost production? Offering a broad range of features in one compact package Rockwell Electronic Overload Relays allow users to cost effectively manage their energy usage and protect vital components whilst being able to monitor motor performance in order to reduce operational costs and minimize the potential production downtime.

SMART DEVICES

Session Code	Title	Description
SD25 Day 1 - 1hr Day 2 - 1hr Day 3 - 1hr	Motor and Asset Protection using Vibration Monitoring	Vibration monitoring, or condition monitoring is an effective way to detect the warning signs associated with motor and machine failure. Why should this critical function be separate from your Logix controllers? Our Dynamix 1444 condition monitoring device integrates completely with your Logix platform and can help you protect your expensive assets by providing continuous and real-time information about your plant fed directly into the where it can be used the most. Learn what the system can do, how it does it, and how you can apply it to real world applications including machinery protection, quality and predictive maintenance.

VISUALIZATION

Session Code	Title	Description
VZ02 Day 3 - 1hr	How to Improve Plant Operations through Better HMI Graphics	Plant operators make decisions every day which can directly influence profitability. In this session, we'll equip you with methods and ANSI/ISA-101 concepts you need to create meaningful content. Learn how to present the right type and amount of visual detail to improve operational efficiency and promote better decision making.
VZ10 Day 2 - 2hrs	Implementing FactoryTalk® Alarms and Events	A robust alarming capability is critical to any HMI system. The alarm system in FactoryTalk® View Site Edition, FactoryTalk® Alarms and Events, delivers industry-leading capabilities for any size system. This hands-on lab focuses on how to best implement and configure FactoryTalk® Alarms and Events with FactoryTalk® View Site Edition and Logix controllers. Users will implement the TrendPro trending control in FactoryTalk® View Site Edition to analyse and rationalise alarm data with control data in their system. Finally users can leverage the notification tactics and strategies of WIN-911 to bring alarm data from a controller to the information layer.
VZ11 Day 1 - 1hr Day 2 - 1hr Day 3 - 1hr	Designing Machine-level HMI with PanelView™ 5000 and Studio 5000 View Designer®: Basic Lab	Learn how easy it is to create and test your next generation HMI project using the new Studio 5000 View Designer software. This lab will introduce you to topics such as setting up a project, creating screens, animating graphic elements, setting up navigation, setting up basic security, taking advantage of pre-defined project content and testing a project.
VZ12 Day 1 - 2hrs	FactoryTalk View Site Edition Application: What's New	This lab is for all levels of FactoryTalk® View Site Edition users and covers the new and enhanced features of our latest releases. Topics include TrendPro, RecipePro+, Logix extended tag properties, alarming enhancements, graphics and animation and mobility enhancements.



#ROKLive

Allen-Bradley, CompactLogix, Connected Components Workbench, ControlFLASH PLus, ControlLogix, E200, Dynamix, FactoryTalk, FactoryTalk Analytics, FactoryTalk Brew, FLEX 5000, GuardLogix, Guardmaster, Integrated Architecture, iTRAK, Kinetix, LogixAI, MagneMotion, Micro800, MicroLogix, PanelView, PartnerNetwork, PlantPAx, PowerFlex, ProposalWorks, Rockwell Automation, Rockwell Automation TechED, Rockwell Software, RSLinx, RSLogix 500, SequenceManager, SLC, Stratix, Studio 5000, Studio 5000 Automation Engineering & Design Environment, Studio 5000 Architect, Studio 5000 Logix Designer, Studio 5000 View Designer, TeamONE, ThinManager and TotalFORCE are trademarks of Rockwell Automation, Inc.

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