



Strategic Alliance: Rockwell Automation and Cisco Systems

Delivering a shared vision for digital manufacturing across the connected enterprise

The digitization of manufacturing, with the convergence of IT and operating technology (OT), is arguably the most significant transition since the Industrial Revolution. Forward-thinking manufacturers are integrating their enterprise networks with the factory floor—and throughout the value chain—to gain new insights and competitive advantage from production data previously locked in siloed machines and processes.

The Internet of Things (IoT) and Big Data analytics are ushering in an even greater era of opportunity, output, and safety as machines talk to machines, self-optimize, warn of anomalies, and even order new parts. But before you can reap the full rewards of IoT, you must carefully consider how you connect your people, processes, and equipment for the secure, intelligent flow of information.

Challenges may include:

- Risk management and security concerns
- Integrating nonstandard, proprietary systems
- Lack of converged IT/OT skillsets

Your Safest, Fastest Path to IT/OT Convergence

Rockwell Automation is the largest pure-play industrial automation company in the world. Cisco is the worldwide leader in networking. Together, we can provide the architectures, products, services, and educational resources you need to help integrate your plant floor with your broader enterprise network:

- Converged plantwide Ethernet architectures: Tested and validated designs, and implementation guidance for both IT and OT
- Joint product development: Built specifically to fill the gaps in a converged industrial-enterprise network
- Security and network services: From feasibility and security assessments through design, implementation, validation, operations, and maintenance
- IT/OT training and certification: To prepare IT and OT professionals for success in the converged world of digital manufacturing and industrial-enterprise networking

Tested and Validated Designs

Our jointly developed Converged Plantwide Ethernet (CPwE) architectures are designed to help you fully integrate and scale EtherNet/IP- and TCP/IP-based networks. As Cisco® Validated Designs, these reference architectures undergo extensive system testing and validation to produce documented results.

“A converged network architecture is crucial for delivering the deep insight end users need to quickly and efficiently adapt manufacturing operations to changing market demands.”

Craig Resnick, Research Director, ARC Advisory Group

To learn more, please visit:

www.rockwellautomation.com/go/cisco

www.cisco.com/go/rockwellautomation

Benefits of IT/OT Convergence:

- Increased visibility and control
- Smarter, faster decision making
- Reduced complexity and costs
- Decreased downtime
- Increased output and faster time to market
- Improved security and reliability
- Lower total cost of ownership

Documented best practices include topics such as:

- [Resilient Ethernet Protocol \(REP\)](#)
- [Wireless LAN technology](#)
- [Identity services](#)
- [Industrial Demilitarized Zone](#)
- [Network Address Translation](#)
- [Site-to-site VPN](#)
- [Migrating Legacy IACS Networks](#)

New Products, Familiar Designs

Together, we designed and built new Layer 2 and Layer 3 managed switches, security and wireless appliances, and a [virtualized data center](#) solution built specifically for converged industrial-enterprise networks. Using proven technology from both companies, IT and OT professionals can take advantage of trusted designs, and familiar commissioning, diagnostics, and deployment tools for faster configuration and support.

People and Process Optimization

As industrial production environments and their corporate enterprise networks become more connected, the demand for skilled professionals who understand the priorities of converged IT/OT is at an all-time high. To help you meet this demand, we have jointly developed a series of [CCNA Industrial Certifications and classroom and e-learning modules](#) to prepare OT and IT professionals for successful careers in digital manufacturing.

For more information, access to training, and the latest thought leadership in the areas of industrial networking, convergence, and IoT, visit [Industrial IP Advantage](#), an online community for expanding IT/OT skills, sponsored by Cisco, Rockwell Automation, and Panduit.

Take the Next Step on Your Digitization Journey

In the future, your ability to make smart business decisions faster; to identify inefficiencies; and to pinpoint potential safety, production, or environmental concerns will be tied directly to your ability to extract, analyze, and share real-time OT data across the enterprise.

To ensure you're not left behind in the digital manufacturing revolution, you must act now to connect disparate systems, sensors, and people for secure and transparent sharing of information.

Rockwell Automation and Cisco not only share an exclusive ability to meet our customers' needs, but also deliver a common architecture framework based on industry-standard IP, Ethernet, and EtherNet/IP. Together, we can help you make the leap to IT/OT convergence, and help ensure smooth, secure connectivity and more—from the plant floor to the boardroom and everywhere in between.

Let us know how we can help you. Contact your Cisco or Rockwell Automation account manager to learn more.

Cisco is the worldwide leader in networking that transforms how people connect, communicate and collaborate. Information about Cisco can be found at www.cisco.com. For ongoing news, please go to <http://newsroom.cisco.com>. Cisco equipment in Europe is supplied by Cisco Systems International BV, a wholly owned subsidiary of Cisco Systems, Inc.

www.cisco.com

Rockwell Automation is a leading provider of power, control and information solutions that enable customers to be more productive and the world more sustainable. In support of smart manufacturing concepts, Rockwell Automation helps customers maximize value and prepare for their future by building a Connected Enterprise.

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