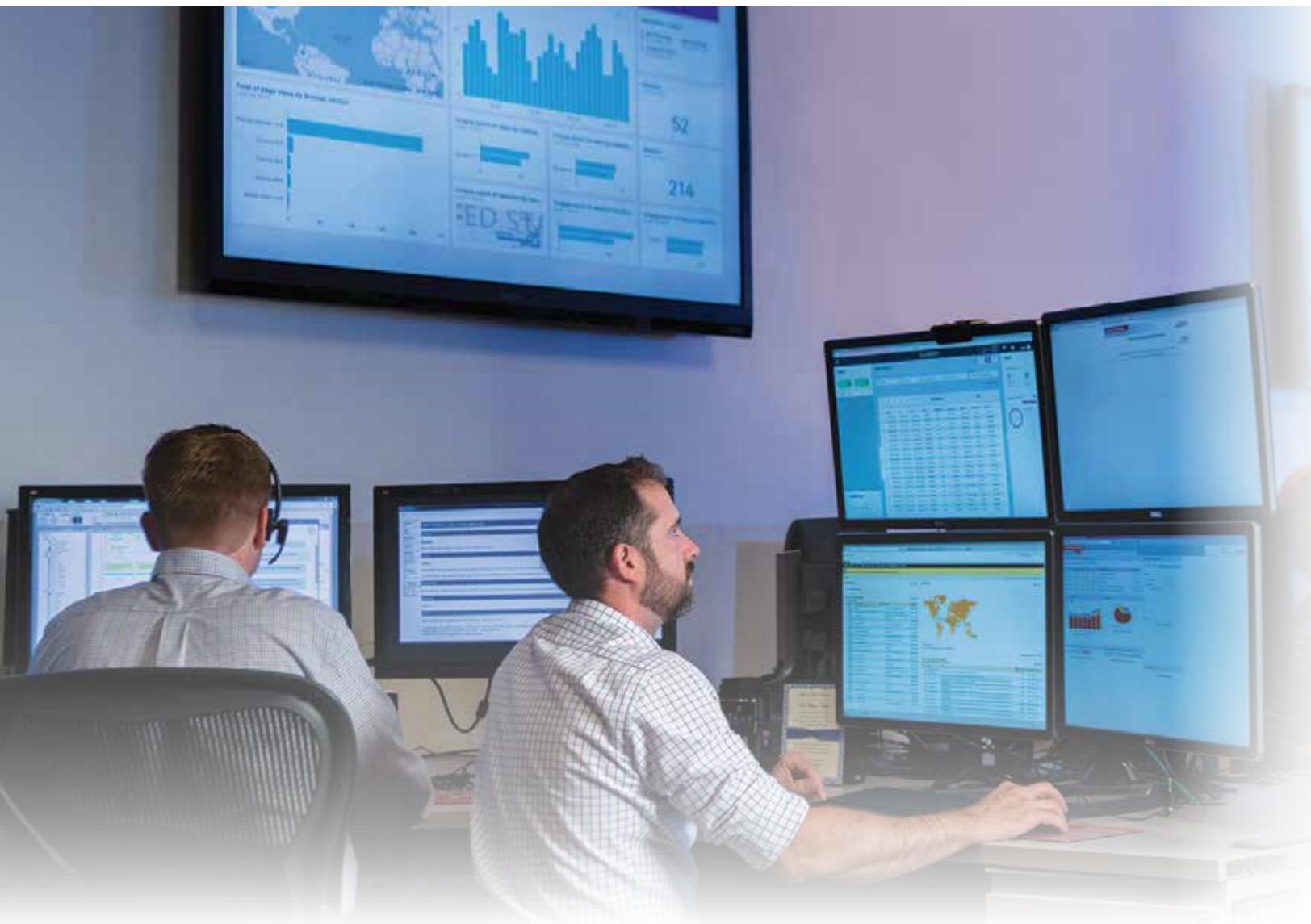


# Information Infrastructure and Security Services

Create a more reliable and secure infrastructure for The Connected Enterprise



LISTEN.  
THINK.  
SOLVE.

 Allen-Bradley • Rockwell Software

**Rockwell**  
**Automation**

# The Backbone of The Connected Enterprise

Connectivity has become vital to success. You need to be able to access your raw production data and turn it into useful information to drive decisions. And you need smart technologies that can help you better understand your operations, enforce workflows, optimize asset utilization and improve collaboration.

You can do all of this and more in a Connected Enterprise. But first you need a modern, secure and reliable information infrastructure to connect the assets, people and information that make up your business.

## Services to Develop, Manage and Drive Performance From Your Infrastructure

Our Information Infrastructure and Security services can help you:

**Assess, design, and implement** a secure infrastructure

**Protect and maintain** your infrastructure

**Capitalize** on your new infrastructure to improve asset and system performance to meet business goals and boost your bottom line

## Based on Established Guidance

Key to our approach is Converged Plantwide Ethernet (CPwE), which helps enable the convergence of information technology (IT) with operational technology (OT). This converged infrastructure features the use of standard Ethernet and Internet Protocol (IP) technology – and is the backbone of The Connected Enterprise.



**“Data is the new currency,** and Cisco and Rockwell Automation will help us get the most out of it.”

## BENEFITS

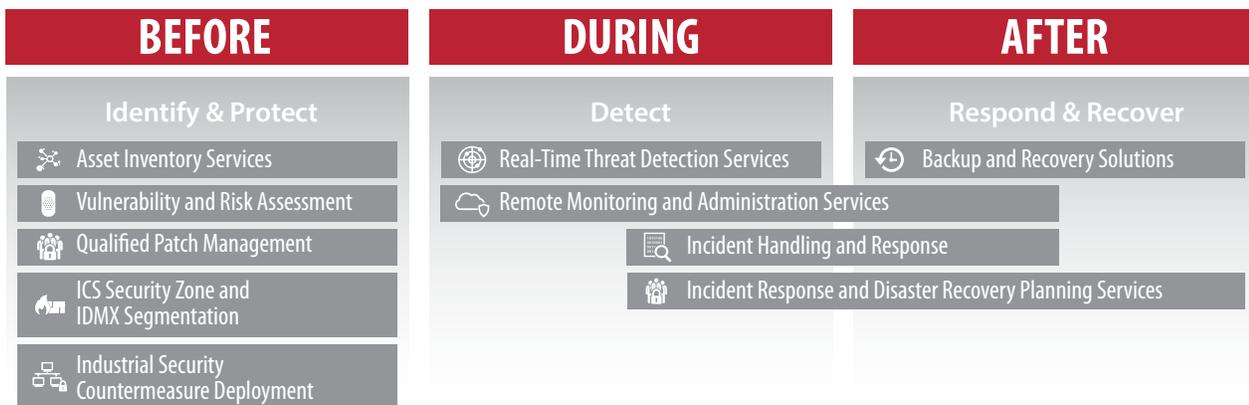
- Multi-discipline application convergence
- Better asset utilization
- Common toolsets and skills/training
- Standard IT security technology, best practices, policies and procedures
- Seamless information sharing

Manufacturing **generates more data** than any other sector.

McKinsey&Company: Digital manufacturing:  
The revolution Will Be Virtualized, 2015

## A PROACTIVE APPROACH TO INDUSTRIAL CYBER SECURITY

Attack Continuum



## BUILD A SECURE, ROBUST, FUTURE-READY NETWORK FOR YOUR CONNECTED ENTERPRISE



ASSESS



DESIGN



IMPLEMENT



VALIDATE



MONITOR

A holistic approach to help you design, deploy, and manage your network infrastructure

“The CPwE solution addresses the needs of and provides for a common model for IT and manufacturing.”

# Infrastructure Development and Management

We give you a single point of contact and all the help you need to design, implement and manage your infrastructure.

**Network Services** can help you wherever you are in your infrastructure development process:

- **Assess:** Understand the condition of your existing IT and OT assets, and identify and remediate potential performance and security issues
- **Design:** Craft a secure information infrastructure that meets your business needs today and scales with you in the future
- **Implement:** Deploy a robust and secure infrastructure on time and on schedule
- **Validate:** Confirm that your network meets installation, security and performance requirements
- **Monitor and Manage:** Navigate the complexities of maintaining your network to maximize uptime

**Pre-Engineered Infrastructure Solutions** are designed for industrial applications, preassembled and preconfigured to save you time, money and hassle when building your infrastructure.

- Our **Industrial Data Center (IDC)** eases the transition to a virtualized environment by delivering all the hardware necessary for multiple operating systems and applications, mitigating the need to design and build it from the ground up
- The **Industrial Network Distribution Solution (INDS 1000, INDS 2000, INDS 3000)** consolidates design, commissioning and industrial environmental protection into a pre-engineered network-distribution package for expanding an existing network or implementing a new one

**Industrial Security Services** address the risks that can come with greater connectivity. We can help you secure your infrastructure, protect intellectual property and assets, and maintain network availability.

- Security assessments
- Defense-in-depth protective measures
- Monitoring and threat detection
- Response action plans
- Backup and recovery



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Shorten your infrastructure project timeline by up to **50 percent**

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**Rockwell Automation® TechConnect<sup>SM</sup> Remote Support** helps keep your infrastructure running efficiently. Our certified IT professionals are also specialists on industrial applications, and can help you install and configure systems, or troubleshoot and diagnose technical issues.

- **Phone support** gives you 24/7 access to our product specialists. **Online support** allows you to chat with our engineers, store useful information, receive product notifications and more
- **Software updates** give you access to the latest software releases for your network and industrial security products
- **Support** for your IT assets provides post-warranty maintenance and support solutions for your storage, server, and networking equipment

**Remote Network Monitoring and Analytics** services can improve network uptime while helping you maintain a secure, robust and resilient infrastructure. We can monitor the performance of your network and can give you valuable insights into security and how well your assets are working. We can even use secure remote access to alert you when performance falls outside of acceptable performance standards or directly remediate issues before they impact production.

## BENEFITS

- Single point of contact
- Simplify and accelerate implementation
- Reduce commissioning time and costs
- Reduce Mean Time To Repair (MTTR)
- Increase network security and robustness
- Extend workforce knowledge

**Industrial Network Training** empowers your workers to develop and oversee your new infrastructure. In collaboration with our Strategic Alliance Partner Cisco,<sup>1</sup> we offer training based on worker needs and desired skill levels.

## OT TRAINING

### Essential Knowledge

- Networking Fundamentals for Industrial Control Systems
- Essentials of Industrial Ethernet Networks for an OT Professional

### Entry-Level Skills

- Managing Industrial Networks with Cisco Networking Technologies

### Associate-Level Skills

- Managing Industrial Networks for Manufacturing with Cisco Technologies

## IT TRAINING

### Essential Knowledge

- Industrial Control Systems Fundamentals for Network Engineers
- Essentials of Industrial Automation for an IT Professional

### Entry-Level Skills

- Interconnecting Cisco Network Devices, Part 1

### Associate-Level Skills

- Managing Industrial Networks for Manufacturing with Cisco Technologies

<sup>1</sup> Strategic Alliance Partners are members of the Rockwell Automation® PartnerNetwork™

# Asset Performance Services

Once your new infrastructure is up and running, you can connect your assets and optimize their performance. Our asset performance services can help you monitor your assets, improve their availability and identify issues before they lead to downtime.

**Asset Reliability** Services use the vast amount of maintenance data within your assets to help improve their performance and reduce risk. We can:

- Create outcome-based reliability programs
- Deploy an automated asset-intelligence system that delivers proactive notification of risks, tracks device changes and helps streamline maintenance-based decisions

**Remote Monitoring and Analytics** Services can help you monitor your critical assets and gain valuable insights into their performance. Production data, asset health and diagnostics and other information help your team make better decisions. Analytic and predictive outcomes can be used to identify or even prevent downtime issues.

**Preventive Maintenance** Service Agreements can keep your critical assets running at peak efficiency. We work with you to identify pending system failures and recommend which components should be repaired or replaced. This can reduce or eliminate the unnecessary repairs and associated costs that occur with most time-based preventive maintenance programs.

## BENEFITS

- Identify issues before downtime occurs
- Monitor asset health on-site or remotely
- Streamline maintenance
- Improve asset availability
- Boost your bottom-line

“The Rockwell Automation Diagnostic and Reliability Manager is like an **EKG heart monitor** for process control equipment.”

Major Oil & Gas Company

## CUSTOMER SUCCESS STORY

# Oil Giant Improves Cyber Security, Lowers Manpower Costs

## Challenges

- Needed a comprehensive system for gathering data from thousands of control devices, spanning six geographically-dispersed oilfields, with diverse operations
- Used a manual database, but the information was incomplete and the collection method couldn't keep up with the large and dynamic installations, including several generations of mission-critical assets
- A corporate SCADA audit identified cyber security risks related to the lack of reliable control-asset data

## Rockwell Automation Delivered Solution

- Innovative Diagnostic Reliability (DR) system provides centralized information gathering and continuous monitoring of the company's assets
- Comprehensive and accurate control asset master inventory is essential to the effective creation and sustainability of a PCN cyber security strategy
- The DR system also takes a deep dive into each asset to understand its status, health and parameter changes
- Improved tracking capabilities, including scans for security vulnerabilities; for example, the system continuously checks the key switch status on processors. When a key switch is open, a hacker could potentially change the programming – an attack that could cause downtime and production losses or, at worst, create safety and environmental hazards.
- The DR system reports if devices are moved or missing. If the DR system shows that a device that was formerly on the network is gone, the system produces an exception report. Company personnel receive this report and follow up to see if the device has been removed or if it's some type of failure or fault.

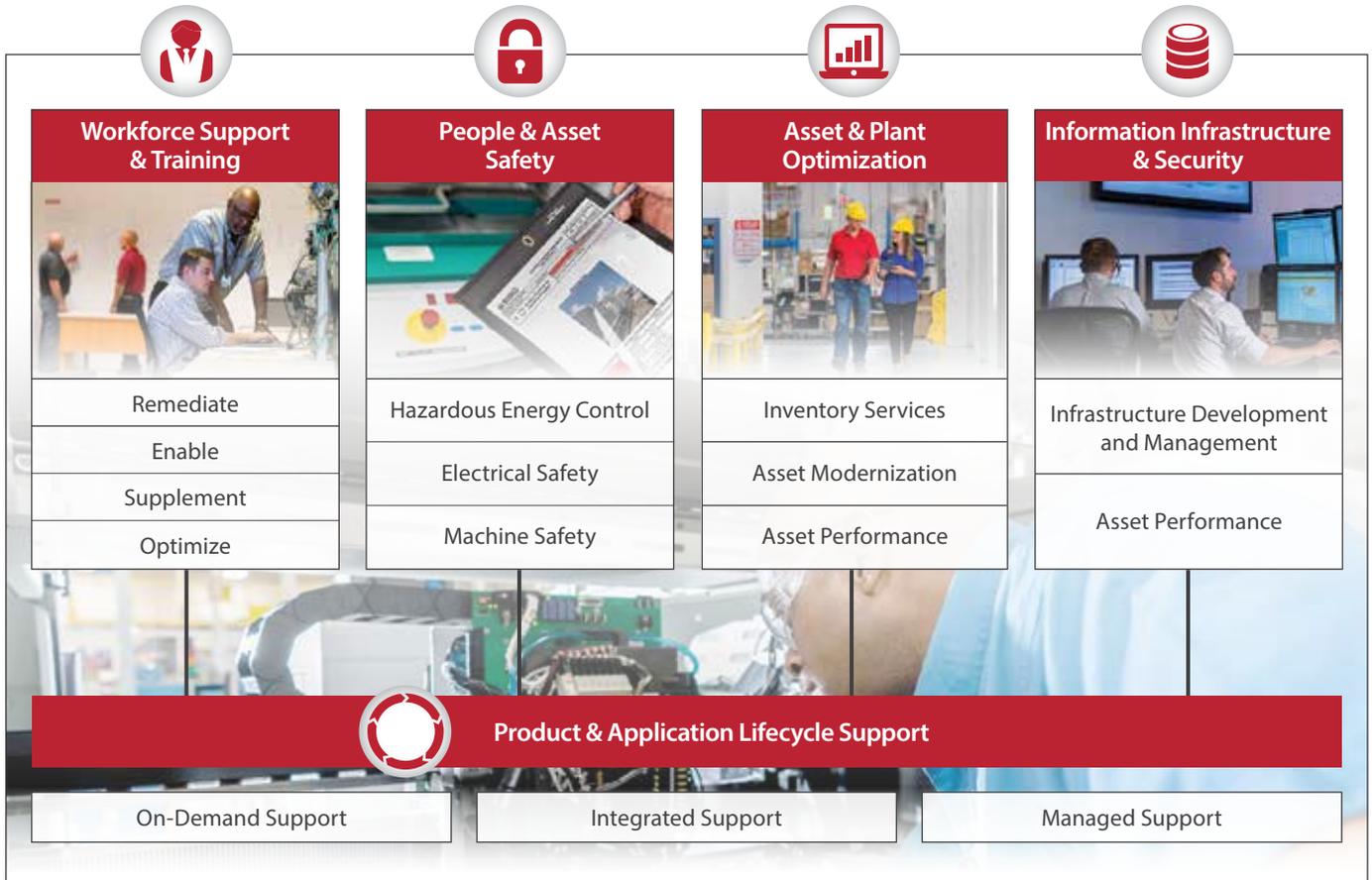
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## Results

- Full compliance with a new corporate cyber security policy, based on ISA99 standard for industrial control systems
  - By moving from a manual database to automated real-time data collection, the company can now perform proactive maintenance. This is helping lower the cost of manpower in the field and yield more barrels of oil per day.
  - The oil giant is so impressed by the preliminary results that it is considering using the DR system as a corporate global standard
- 

“Different people in different industries have spent tens of thousands of hours trying to figure out how to automatically convert this kind of information into operational intelligence. Today, our customer is using data derived from the DR system to help overcome long-standing business obstacles in a matter of days, if not hours.”

Global Product Business Manager, Reliability Services, Rockwell Automation



For more information about how we can help you solve your unique business challenges, contact your local authorized Allen-Bradley distributor or Rockwell Automation sales office, or visit: [rok.auto/services](http://rok.auto/services)

Connect with us.

Services vary by region.

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**Power, Control and Information Solutions Headquarters**

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444  
 Europe/Middle East/Africa: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640  
 Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846