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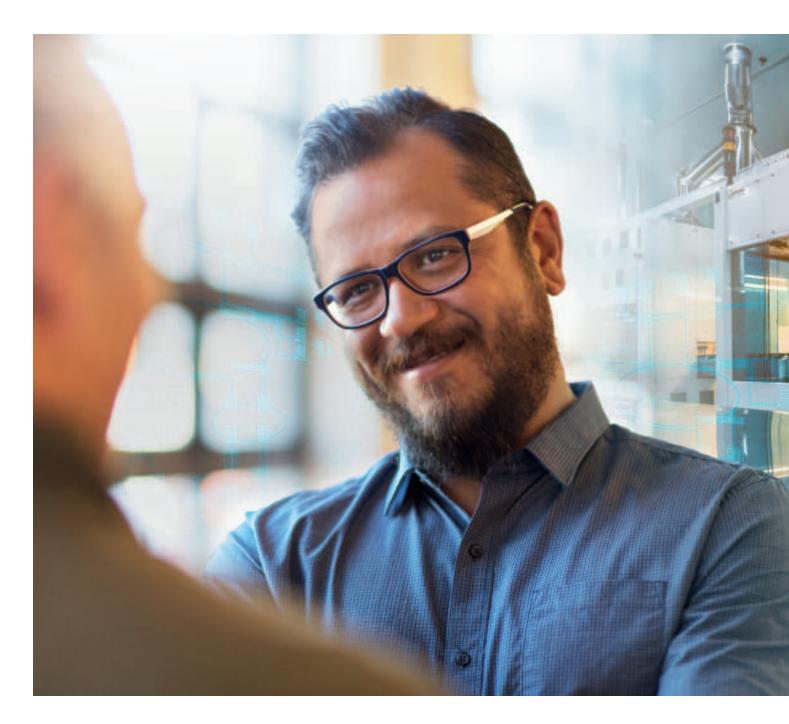
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### Communication networks designed for the future

**Professional Services for Industrial Networks** 

usa.siemens.com/industrial-networks-services

### Industrial Networks Professional Services from Siemens





### Getting more from your network, means getting more business.

Industrial and mission-critical enterprises are increasingly digitalizing their operations. Processes are becoming more and more integrated at all levels and data volumes continue to grow at exponential rates. Communication networks have never been more important – also for maintaining a competitive advantage in dynamic market environments. Implementing state-of-the-art network solutions that ensure secure, reliable and flexible communications is one thing. However, leveraging the full potential of today's complex digital architectures definitely requires expert support. With extensive vertical market experience in designing and implementing communication networks that stand the test of time, a trusted partner like Siemens or a certified solution partner can ensure increased business success and futurereadiness.

### The Siemens Industrial Networks Professional Services difference

Why partner with us? With a market-leading portfolio of rugged, standards-based communications technologies and an in-depth understanding of network designs, we are well positioned to assist you in developing an integrated industrial network solution that precisely suits your needs.

Our extended offering also comprises cuttingedge solutions for automation environments and other mission-critical industry applications, including electrical power, oil and gas, and transportation.

At Siemens, we have the know-how, the experience and the products to bring your industrial network plans to life – and in full compliance with all regulatory guidelines.

On-Site Service and Support



### Gaining a clear overview

Creating a customized industrial network solution begins with a little investigation. With an on-site visit, we can conduct a thorough assessment of the existing network, identify potential performance issues or security vulnerabilities, and develop a specification of needs. Conducted together with the client, our on-site services are designed to take stock of the current network, gauge against our client's goals, and provide a consultative roadmap for a future-ready and secure network. Our Industrial Network Audit or the Network Security Assessment can significantly reduce time and costs, give you peace of mind that your network is secure, and ensure smooth future project implementations.

### **Industrial Network Health Check**

The documented audits and certifications frequently include information on:

- Existing network architectures
- Device inventory
- Suggestions for improvements

### **Benefits**

- Continuous network monitoring and supervision
- Event anticipation and resolution prior to occurrence
- Troubleshooting
- Pinpoints network weaknesses offering potential for optimization



### **Network Security Assessments**

Gain essential insights through in-depth analysis to identify and gauge security vulnerabilities within your existing network architecture, recommended actions and help with implementing security solutions.

- Discovery and analysis
- Vulnerability assessments
- Audit reports
- Implementation plans
- Design, development and delivery of security solutions

### **Benefits**

- Uncovers vulnerabilities and potential risks in the current network architecture
- Captures and documents details of findings and recommendations
- Provides a path forward to close gaps and protect people and assets. Pinpoints network weaknesses offering potential for optimization

Learn more or visit usa.siemens.com/network-security



Design and Consulting



## Working out the details

As part of our Network Design and Consultation services, we conduct a thorough analysis of the existing network and infrastructure performance. Whether the choice is Network Design Services or our Radio Frequency (RF) Planning and Site Assessment, we explore network improvement options through a process of technical consultations with our clients. The result is a tailor-made network solution designed specifically for each application.



### **Network Design Services**

Whether for a new or existing network, an expansion or optimization, no matter the scale, our qualified experts can assist you in making it happen.

- Definition of parameters: network segmentation, redundancy protocols in layer 2 and 3, IP plan and routing protocols
- Creation of wiring diagrams and network port assignments
- Definition of firewall rules and cyber security components

### Benefits

- Proper network implementation
- Elimination of ad hoc configurations
- Documented network design

### Radio Frequency (RF) Planning and Site Survey Services

To successfully engineer a network implementation, expansion or modernization, it helps to get a clear picture of how well the current wireless network is performing.

- Definition of RF coverage
- Frequency assignment to avoid interferences
- Assess RF interference in the area
- Infrastructure consultation and support
- Confirmation of physical location and surrounding
- Fine-tuning of RF design specifications
- Optimization of RF performance environment
- Analysis of structural surrounding conditions

### Benefits

- Simulation of RF coverage
- Documented radio channel planning
- Overview and documentation of coverage prior to implementation
- Elimination of ad hoc configuration
- Consultation and support with frequency planning
- Verification of radio channel planning
- Avoidance of interference
- Detailed bill of materials for installation to avoid scope gaps

Integration and Deployment

# Putting it into place

Failure of critical communications equipment is one of the worst nightmares for any industrial or mission-critical operation. Minimizing the likelihood of a network malfunction and quickly getting it back up and running is what our Pre-Configuration & Testing measures and our Implementation Services are all about.

### Pre-Configuration & Testing Services

Our certified experts pre-configure and thoroughly test hardware prior to deployment.

- Creation of configuration files for upload to network components
- Pre-configuration of hardware according to project specifications prior to delivery
- Factory Acceptance Testing (FAT) of equipment prior to delivery

### Benefits

- Reduction of on-site installation time
- Correct network operation even before hardware delivery
- Baseline configuration prior to on-site testing



### **Implementation Services**

Quickly getting your industrial network up and running securely and reliably is another area in which our professionals excel in.

- Configuration of hardware according to project specifications
- Equipment testing
- Installation and commissioning of SCALANCE and RUGGEDCOM network components through qualified partners and subcontractors

### Benefits

 Fast, accurate on-site project implementation based on years of experience, training and certification



**Training Services** 



## Bringing it to life

Once implemented, it's important that the technical staff is quickly trained on properly operating and maintaining the new network. Given the complexity of modern enterprise-wide networks, it is essential to have an understanding of the "big picture." The interconnections between production/ operations and IT systems are thoroughly analyzed in the trainings we offer, which include certifications and customized courses (workshops).



### **Standard and Customized Courses**

Our standard training services cover three areas of expertise and are designed to provide participants both operations-specific knowledge as well as hands-on experience.

- Switching and Routing in Industrial Networks
- Wireless LAN or WiMAX in Industrial Networks
- Security in Industrial Networks

Upon request, our experts will also tailor course content to meet specific objectives.

### Benefits

- Gain industrial network expertise
- Proficiency in latest tactics and technologies
- Real-life learnings
- Increased network security, reliability and flexibility

Learn more at usa.siemens.com/yourcertification

### Industrial Networks Professional Services Quality Indicators

Certified professionals with the ongoing commitment to continuing education.

Knowledge of Industrial Ethernet standards.

Detailed understanding of Siemens SCALANCE and RUGGEDCOM products acquired through hands-on design, and field commissioning and testing.

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