ABB Ability™ Symphony® Plus SCADA

Optimal orchestration for your geographically distributed systems.
To be an effective music conductor, you need complete visibility of your orchestra.

Being an effective operations leader is no different. You need a clear view of your geographically dispersed systems from one place.

Introducing ABB Ability™ Symphony® Plus SCADA. Optimal orchestration for your geographically distributed systems.

The seven challenges in SCADA automation

Supervisory control and data acquisition (SCADA) systems are critical in helping industrial organizations maintain efficiency, process data for smarter decisions, and mitigate downtime through better communication. This requires automation.

The key to automating SCADA systems is to address the following:

1. Organizations must monitor and operate large, geographically distributed systems.
2. Monitoring all assets and equipment requires a unified operations center.
3. Minimizing total cost of ownership is a major concern.
4. Maintaining physical security and cybersecurity are increasingly difficult.
5. SCADA systems must integrate with legacy and newer business systems.
6. Organizations are under increasing pressure to optimize their capex investments.
7. Growth is the goal. But cost-effectively adapting to growth is the challenge.
ABB Ability™ Symphony® Plus SCADA

ABB Ability™ Symphony® Plus SCADA delivers optimal orchestration for geographically distributed systems.

ABB Ability™ Symphony® Plus SCADA is an open, flexible and scalable solution that serves as a reliable and secure platform for all SCADA applications. You need an efficient way to supervise operations, collect and analyze data, and generate reports.
Openness, flexibility and scalability

To be effective, SCADA systems must integrate with existing business and operational systems. They must scale easily and cost-effectively, and be flexible enough to work in a variety of settings, assets and processes.

ABB Ability™ Symphony® Plus SCADA features an open architecture to support complete integration of remote sites, PLCs, controllers, electrical systems and intelligent devices. This architecture optimizes management of geographically distributed sites.

Reliable, secure systems help minimize total cost of ownership.

Secure and reliable
Delivers a secure and reliable communication and control environment for managing geographically distributed systems.

Flexible and scalable
System architecture supports single-node (small), large, multisystem and distributed configurations cost-effectively.

High availability
Delivers high availability for increased uptime, thereby improving process reliability and reducing risk.

Open architecture
Supports complete and seamless integration of remote sites, PLCs, controllers, electrical systems and intelligent devices.
Visual awareness

What you can’t see, you can’t manage. Without a clear view of all your systems, you lack the awareness to respond quickly to abnormal situations.

ABB Ability™ Symphony® Plus SCADA is a secure and intuitive human-machine interface (HMI) with easy navigation. The high-performance HMI and custom workplaces increase efficiency and reduce human errors.

Annual losses in process industry

- **Annual losses**: $20B
  - **80% avoidable**
  - **20% unavoidable**

32% OPERATOR ERROR:

$6.4B

Minimize unscheduled shutdowns and meet health, safety and environmental requirements with our HMI.

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Remote operations

ABB Ability™ Symphony® Plus SCADA delivers native central control room and remote management solutions for cost-effective supervision and control of geographically distributed systems.

- Easy management: Supervisory control for easy remote site management
- Intuitive navigation: Intuitive GIS navigation for more effective operations
- Any device: Remote operations from any device at any time
- Native management: Native remote command and control management
- Remote notifications: Remote notifications of system alarms through SMS & email
- User control: User privileges elevation when required

Lower operational expenditures with remote management solutions from ABB.
Efficient engineering

Managing geographically distributed systems requires efficient engineering. Duplicated effort, redundant processes and wasted resources must be eliminated. Efficiency is paramount.

ABB Ability™ Symphony® Plus SCADA allows engineers to define their own objects and properties for SCADA signals. Every real object has a digital twin as a virtual object created within the system. Relevant signals and data are contained in the engineered object.

You engineer and commission projects in less time – and more efficiently.

ABB Ability™ Symphony® Plus SCADA offers object-oriented engineering so you easily contextualize data into useful information. Simple system engineering means efficient project deployment.

You generate remote operational graphics with no additional labor. Tailored solutions deliver a substantial reduction in engineering and configuration effort and cost.
A key challenge is staying ahead of competitors. In an era of digital transformation that means improving operational performance with advanced technologies.

ABB Ability™ Symphony® Plus SCADA facilitates innovation with speed through edge and cloud integrated solutions. ABB supports your global footprint of installed systems throughout their lifecycle.

ABB Ability™ Genix, together with ABB Ability™ Symphony® Plus SCADA, enables digital transformation. You gain access to a comprehensive app ecosystem with AI/ML models. You protect your investment with ABB as a supplier and improve operational performance through innovation.

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Digital innovation

45% (2)

of the data created by IoT devices will be stored, processed, analyzed and acted on at the edge in 2020

75% (1)

of data will be processed at the edge by 2025

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State of data utilization

(1) Gartner

(2) IDC
Benefits

- Enables centralized, consolidated facility operations
- Gives you one point for vertical integration
- Minimizes total cost of ownership through cost-effective deployment
- Decreases unscheduled shutdowns
- Reduces operational expenditures with various remote management solutions
- Simplifies and speeds up engineering and commissioning of projects
- Improves operational performance
- Optimizes troubleshooting with consolidated alarm and event lists

ABB Ability™ Symphony® Plus SCADA
Why ABB

Experience
- As a leading automation provider, ABB is uniquely qualified to provide proven SCADA solutions.
- ABB Ability™ Symphony Plus includes over 7,500 installations in operation all over the world, with more than 5,000 energy applications.

Knowledge
- ABB has delivered and served SCADA solutions for the water and power market for more than 40 years.
- Symphony Plus SCADA includes an integrated suite of products for engineering and operations, covering all the components of the automation system, including third-party devices as PLCs and RTUs.

Cyber security
- ABB’s comprehensive approach to cyber security addresses both customer needs and internal development processes.
- Symphony Plus SCADA has a reliable operations environment with built-in security based on IEC 62351-8 security standard.

Service
- ABB services – from spare parts, repair, training, technical support, Advanced Digital Services, to upgrades and evolution – help improve productivity, minimize energy consumption, prolong asset operating life and minimize the cost of ownership.
- Our global reach brings world-class capabilities to your locality to ensure successful outcomes.

Lifecycle
- ‘With advancements in technologies, we ensure to adopt these into our products without affecting performance and reliability, allowing customers to further enhance their investments throughout the lifecycle.
- ABB’s evolution without obsolescence policy always protects customers’ financial and intellectual investments through the stepwise evolution and upgrading of electrical, control and instrumentation systems.
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