Upgrading your control system is easier than you think.

Modernization solutions for industrial automation

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Requires Adobe® Reader® for full interactive experience
Prepare your plant for the future with modernization solutions from Schneider Electric.

Without change management, robust process automation architectures, and new technology investment with a clear ROI, no industry organization will achieve business excellence. Your main challenge will be to span new technologies, people, and processes into one unified architecture that meets your needs for today and tomorrow. Our modernization solutions help you keep your assets up-to-date via a smooth technology transfer path, helping you:

- Reduce unplanned downtime
- Minimize maintenance costs through standardization
- Capitalize on existing investment and know-how
- Improve plant productivity and flexibility
- Maximize energy efficiency
- Increase protection against cyber threats

What will the plant of the future look like?
Modernization solutions for industrial automation

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How to navigate:
Sharpen your competitive edge with planned modernization

Unplanned downtime caused by aging control systems is a threat to business performance. Therefore, a scheduled plant modernization is crucial for sustaining your competitive edge.

Despite numerous challenges, like minimizing production downtime during migration or extending the lifespan of existing assets, you can achieve a successful and cost-effective plant upgrade by partnering with world-class automation experts.

Your partner for business transformation

With Schneider Electric, you are choosing an industry leader with extensive experience, innovative technology, and proven methodologies. Combined with our global support capabilities, we help you migrate efficiently to a state-of-the-art control system.

Our highly trained automation experts tailor the solutions to your operational and financial goals, freeing you to focus on your core business.

The average impact of unscheduled downtime

Source: ARC survey 2010

5% of total production value
Sharpen your competitive edge with planned modernization

Expertise and support throughout your system life cycle

Millions of our automation products (PLC, HMI, I/O, drives, and SCADA system) are in operation worldwide in industrial applications. As experts in Modicon™ and Telemecanique™ technology, we have successfully upgraded plant control systems for our customers around the world. In cases with third-party systems, Schneider Electric works closely with the system integrator to obtain excellent results.

Once your installation is upgraded, we continue to support you with a full suite of services designed to optimize your plant’s productivity throughout its lifespan.
Transition smoothly to a future-ready plant

Whether you plan to modernize your control system in phases or in one go, our modernization solutions help you transition smoothly, from initial assessment through to maintenance of the revitalized installation.

Facilitating the initial audit

We help you evaluate the current status of your automation system and plan how to move forward:

- Identify potential risks
- Recommend a prioritized course of action
- Perform a cost-benefit analysis
- Customize a migration plan for your plant
Transition smoothly to a future-ready plant

Optimizing the migration process

Based on our proven methodology, our migration solutions allow you to:

- Capitalize on your prior investment in software and hardware
- Reduce downtime with time-saving migration products and tools
- Mitigate risks with automated conversion tools

Our modernization plans are designed to meet your needs. Discover the benefits!

- **Partial:** Upgrade CPU, retain all I/O modules. Targeted modernization of critical production controls
- **Stepwise:** Upgrade CPU, migrate I/O modules over time. Boost your system capabilities while retaining existing assets
- **Total:** Upgrade CPU and all I/O modules. Redesign your entire control system to a totally updated and integrated system
Transition smoothly to a future-ready plant

Maximizing operational efficiency

By modernizing, you can now experience state-of-the-art automation control through Unity™ Pro, the single software platform for your PLCs. The Unity Pro software unifies your Schneider Electric PLCs, helping you simplify processes and increase your plant’s productivity.

Furthermore, we continue to support you with comprehensive service contracts, including:

- Long-term technical support
- Easy access to spare parts, on-site and off-site
- Extended warranty of your upgraded installation

Delivering optimal operational support, our Maintenance and Support Services portfolio contains modules that can be purchased on a stand-alone basis or packaged into a tailored agreement.
Revolutionize your automation control with EcoStruxure

Our modernization solutions are based on EcoStruxure Plant™, an integrated architecture for driving plantwide productivity and energy efficiency.

Your renewed control platform can now leverage EcoStruxure architecture to deliver a combination of capabilities, tools, and resources to complete your projects in less time using proven and integrated technologies, and leveraging a powerful industrial software portfolio.

- Operational integrity to facilitate risk reduction, continuous production, business continuity, safety, and security
- Operational insights to extract maximum value and enable each worker to be faster, more agile, and more accurate
- True efficiency to make the most of manpower, assets, and resources now, in preparation for generations to come
- Future-proof operations to ensure the technology and intellectual property you invest in today won’t be obsolete tomorrow

EcoStruxure Plant, your integrated and collaborative architecture

EcoStruxure for Plant from Schneider Electric is our global process automation architecture for discrete to continuous applications. It includes DCS for process applications and a complete range of safety solutions. These are now delivered alongside hybrid control system applications, plant and infrastructure for discrete applications, and telemetry for remote architectures.
Optimize productivity throughout the system life cycle

Our modernization solutions are part of a comprehensive range of services supporting your automation assets, including PLCs, drives, HMI, and SCADA systems.

Life cycle services from Schneider Electric help sustain the optimal performance of your modernized facility throughout its lifespan.

Click on the life cycle phases to learn more

Renew: Modernization and migration services with minimal risk and effort

We support you with technical expertise and services to facilitate a smooth and minimal-risk transition to newer technology
Prepare your plant for the future.
Contact our Field Services team today!

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Your partner for business transformation

With Schneider Electric™, you are choosing an industry leader with extensive experience, innovative technology, and proven methodologies. Combined with our global support capabilities, we help you migrate efficiently to a state-of-the-art control system.

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Customer testimonials

“Throughout the plant upgrade, Schneider Electric was able to apply its learnings from previous projects to ensure the PLC migration ran smoothly in the fastest time possible.”

- Mark Mills, Manager of Electrical & Mechanical Department, Hunter Water, Australia

“The comprehensive services provided by Schneider Electric allowed us to progressively migrate our automation platform to suit our business requirements. This enabled us to time the changes so that we could schedule the migration to coincide with planned maintenance downtime.”

- Maarten de Vries, Senior Electrical Engineer, Nyrstar, Australia

“The fact that we were able to conserve the original I/O wiring made this a particularly cost-effective solution. Our estimates indicated that other solutions would easily double the cost of Schneider Electric solution. There is no better or faster migration solution on the market for this kind of installation.”

- Jocelyn Moore, Electrical/Instrumentation Technician, Rio Tinto Alcan, Canada
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Instant Autodiag report

Use Autodiag, our automatic-diagnostic tool, for planning your modernization program. Autodiag produces an instant, free, and no-obligation report that highlights any critical issues in your equipment life cycle.

Contact your Schneider Electric sales representative for a free trial now!
Transition smoothly to a future-ready plant

Optimizing the migration process

Based on our proven methodology, our migration solutions allow you to:

- Capitalize on your prior investment in software and hardware
- Reduce downtime with time-saving migration products and tools
- Mitigate risks with automated conversion tools

Our modernization plans are designed to meet your needs.

Discover the benefits!

- **Partial: Upgrade CPU, retain all I/O modules.**
  - Targeted modernization of critical production controls
- **Stepwise: Upgrade CPU, migrate I/O modules over time.**
  - Boost your system capabilities while retaining existing assets
- **Total: Upgrade CPU and all I/O modules. Redesign your entire control system to a totally updated and integrated system.**

### Products and tools for cost-effective migration and maximized uptime

Schneider Electric offers a unique range of products and tools to help minimize the costs and effort of migration while maximizing the reliability and performance of your system.

**Conversion tools for PLCs, SCADA systems, HMIIs, and drives**

Preserve and capitalize on your existing investment and accumulated know-how

- **I/O interface**
  - Retain existing I/O with the new controller

- **Gateways**
  - Retain fieldbus I/O and network with new controller

- **Quick-wiring adapter**
  - Retain existing field devices and wiring

- **HMI connectivity**
  - New HMI can be connected to existing controller and I/O

- **Engineering libraries**
  - Faceplates and function blocks with similar look and feel as the legacy system reduce the need for retraining

- **Data encryption tools**
  - Increase protection against cyber threats to the data inside your controller as well as against corruption of your firmware, software, memory, and processor
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Partial

Example of a controller replacement

Replace the CPU and software without changing the I/O to instantly gain the benefits of a more powerful platform.

Your benefits

• Preserve your investment in application design and embedded process expertise
• Extend the life of your existing control system incrementally while providing new operational capability
• Enable openness of the system and connectivity to new technology
• Provide a smooth transition for your operations team
Transition smoothly to a future-ready plant

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Stepwise

Example of a planned modernization

Systematically modernize the functional elements over several maintenance periods, in the sequence of your choice:

- Install an industrial Ethernet plant network
- Standardize to a single PLC software
- Upgrade to networked HMI
- Upgrade or install a SCADA system

Your benefits

- Increase production capability and manufacturing flexibility
- Consolidate different automation systems under a common HMI
- Provide a smooth transition for your operations team
Transition smoothly to a future-ready plant

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Total

Example of a plant expansion/full upgrade

Expand your plant with new hardware, networking, data access, and HMI. After the expansion, modernize the entire facility over several cycles as part of an ongoing maintenance plan.

Your benefits

• Retain the intellectual property of your legacy control applications
• Minimize total cost by reusing key components from existing assets
• Maximize plant productivity and energy efficiency with minimal risk and effort
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Maximizing operational efficiency

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What is Unity Pro?

Featuring a wide range of functions and collaborative tools, Unity Pro software lets you unify the control of your Modicon units with a single software platform.

- 100% graphics-based configuration with customizable toolbars and icons, plus advanced drag-and-drop and zoom functions
- Built-in library with pretested application function blocks as well as user-developed blocks that are reusable across applications
- Integrated and synchronized editors for all design elements
- Context-sensitive help and tool tips
- Advanced, intuitive diagnostics
- Compliance with IEC® 61131-3 PLC programming standard
- Choice of five IEC programming languages
Optimize productivity throughout the system life cycle

Our modernization solutions are part of a comprehensive range of services supporting your automation assets, including PLCs, drives, HMs, and SCADA systems.

Life cycle services from Schneider Electric help sustain the optimal performance of your modernized facility throughout its lifespan.

Click on the life cycle phases to learn more

Plan: Best solutions for your needs

We work with you to understand your needs and develop the right design for your automation solution.
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**Install**: Availability of your solution

We help you convert your plans into an efficient, reliable, and safer solution
Operate: Smooth processes

We help you resolve everyday technical issues and simplify maintenance to deliver increased uptime and efficiency for your automation assets.
Optimize productivity throughout the system life cycle

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Optimize: Proven experts and remote monitoring systems for high performance

Our Field Services experts give you an actionable roadmap to reduce risk and improve system performance and competitiveness