Align automation engineering, operations, and maintenance for enhanced profitability

Triconex, Modicon, and Schneider Electric connectivity solutions for Foxboro Evo

schneider-electric.com/processautomation
How much integration do you need?

Timely access to production and operational data need no longer be a barrier to business success. If you are interested in new strategies to empower engineering, operations, and maintenance teams — and synchronize their efforts to improve profitability, Schneider Electric offers a full portfolio of solutions that can help.
Closer integration and connectivity across automation, safety, and electrical systems presents an opportunity to reduce capital and operating expenses while continuously adding value to production output.

While many productivity and collaboration tools are already built-in to our Foxboro Evo™ process automation system, Triconex™ safety systems, Modicon™ PLCs, and Schneider Electric motor control and electrical systems, we streamline this further with advanced connectivity that makes it easier for you to achieve the following benefits:

- **Improved capital utilization**: Reduced capital expenditure (CAPEX), operational expenditure (OPEX) and reduced energy consumption.

- **Easier maintenance**: Reduced equipment and spares; greater opportunity for comprehensive preventive maintenance strategy and support; faster response to issues at every level.

- **Increased efficiency**: Less engineering, documentation, testing and training.

- **Smaller footprint**: Less hardwired signals between systems, elimination of redundant components, resulting in systems that occupy less physical space, consume less energy and generate less heat.

- **Unified user system experience**: Access and configuration of all components via a common user interface.

- **Lower total cost of ownership**: Gains in efficiency, maintenance, footprint reduction, and user experience for significant overall savings.

- **Improved capital utilization**: Reduced capital expenditure (CAPEX), operational expenditure (OPEX) and reduced energy consumption.

- **Easier maintenance**: Reduced equipment and spares; greater opportunity for comprehensive preventive maintenance strategy and support; faster response to issues at every level.

- **Increased efficiency**: Less engineering, documentation, testing and training.

- **Smaller footprint**: Less hardwired signals between systems, elimination of redundant components, resulting in systems that occupy less physical space, consume less energy and generate less heat.

- **Unified user system experience**: Access and configuration of all components via a common user interface.

- **Lower total cost of ownership**: Gains in efficiency, maintenance, footprint reduction, and user experience for significant overall savings.
Integrating safety with process control

Integrating process control and safety can have economic and operational benefits, but only if done without risk of compromising integrity. The Triconex unified communications module (UCM) provides direct integration to the Foxboro Evo control network — providing data exchange between Tricon safety controllers and the Foxboro Evo™ process automation system.

The UCM model uses an “integrated-but-separate” strategy and uses diverse technology to provide low-risk access to benefits such as the following:

Peer-to-peer communications
The UCM module enables peer-to-peer communications with the control processor, and improves interface redundancy.

Advanced engineering environment
Both Foxboro Evo and Tricon systems share a single tag database and a common engineering environment. Real-time sequence of event (SOE) system data can be integrated directly and managed as a unified system.

Risk management
Users can choose to keep process control and safety systems completely independent, or select the level of integration that best meets their needs. Modules can be replaced online without halting operations.

System availability
Pervasive redundancy in hardware and software optimizes system availability and reduces risk. Improved redundancy and failover reduce engineering effort.

Shared access
The option for a single operator interface further streamlines engineering and lessens training requirements.
Integrating PLCs with process control

Many operating assets want to harness the technology, modularity and cost benefits of PLCs together with the scale and power of a DCS. With a Schneider Electric intelligent interface between our Modicon Unity Pro™ and Foxboro® control editor, you can configure Modicon PLCs from a Foxboro Evo system automatically, resulting in the following benefits:

**Less error and greater engineering efficiency**
Automatic configuration automates manual tasks, reducing the chance of human error and increasing engineering efficiency.

**Easier tag handling**
Select tags and store PLC tag data efficiently. Interface extracts tag data easily and generates control object names automatically.

**Change management**
Identify and propagate changes made to PLCs. Make changes online, without halting production. Foxboro Evo system receives immediate update whenever PLC configuration changes.
Efficient use energy impacts the performance, safety and ultimately profitability of just about every process.

Schneider Electric’s intelligent power and motor control center (iPMCC) approach blends process automation and energy management to enable safer, more reliable, and more cost-efficient energy use. It provides designers and manufacturing engineers with better access to fresh, low-cost, and trustworthy data for validating design options and estimating the benefits of plant modernization projects. Schneider Electric offers iPMCC solutions with full integration to a Foxboro Evo process control system, resulting in the following benefits:

**Systems integration from day one**
Having all components originate from the same trusted source results in shorter project lead times, reduced onsite wiring, and easier commissioning and operation.

**Versatile communications architecture**
iPMCC with an integrated Foxboro Evo system is fully compatible and ready to connect, whatever the communication protocols or site infrastructure: Ethernet TCP, Modbus, Ethernet/IP, PROFIBUS, DeviceNet, or CANopen.

**Reliable operation that anticipates problems**
An integrated iPMCC/Foxboro Evo solution improves reliability for operators, running process and device diagnostics to anticipate failures. Users are alerted to potential problems and changes in protection parameters. Detailed statistics empower managers to continuously review and improve operation.

**Accurate, enterprise-wide view**
An integrated iPMCC/Foxboro Evo solution reduces wasted energy by furnishing better load control. Overall equipment efficiency leads to lower operating costs and reduced production losses. Day-to-day operations are streamlined — because the right people get the right information at the right time.
Future-ready

By integrating safety, PLCs, and electrical control across the powerful and versatile Foxboro Evo automation system, you will be well-poised to take full advantage of the next generation of industrial connectivity.

Your people can configure and manage all controls from a common interface and engineering environment — so they can design control strategies that leverage advanced process, device, operational, and business intelligence. You get all this with minimal risk of the common mode failures or security breaches that often come with less sophisticated integration approaches.

Enjoy full integration, productivity, and profitability today — and tomorrow — with critical connectivity from Schneider Electric.