Upgrade Your SCADA Controls
in 3 (or 4) Easy Steps

Phased Replacement Options for a Legacy SCADA System

Presenter: Jim Barish, Vice President of Sales & Client Services
Upgrade Your SCADA Controls in 3 (or 4) Easy Steps

Before: Original 800 Series remote I/O (RIO) racks in dryer area main control enclosure.

After: Quantum Series high-density I/O in the same enclosure.
Migration

In a 2010 study of process automation users, Automation Research Corporation (ARC) identified that 88% of these users confirmed the use of automation beyond the manufacturer’s obsolescence date. In this same study, a clear majority of users acknowledge having NO lifecycle plan.

As a manufacturer today, you are being driven to leverage your automation investment in order to create an architecture for continuous optimization.

Drivers for Migration
- Productivity Gains
- Process Innovation
- Rising maintenance & parts costs
- Reducing Downtime
- Increase Capacity/Throughput

Business Goals
- Improving
  - Data availability & security
  - Production flexibility & quality
- Reducing downtime & maintenance costs
- Meeting regulatory standards
Migration Plan

Assess
- Assess & document your control system
- Understand your current & future needs
- Identify reliability and longevity issues
- Determine scope of project
- Understand your cost

Develop a Plan
- Work with your partners to review your options
- Develop migration plan to meet your needs
- Document the benefits of the new system

Implement
- Engage the right partner
- Execute developed plan
- Document benefits of migration
Product Lifecycle Mapping

- **Active** - Current, in-stock product, Full support (consulting, repair, training, transactional, and contract services)

- **Matured** - Low inventory, support through forecasted date, Well-defined migration path with incentives

- **Discontinued** - No new product; repair services available

- **Obsolete** - Product and repair services unavailable

Additional information:
- **SIMATIC S7-300 CPU 315-2 PN/DP, CENTRAL PROCESSING UNIT WITH 256 KBYTE WORKING MEMORY**,
  1. INTERFACE MP/DP 12MBIT/S, 2. INTERFACE ETHERNET PROFINET, MICRO MEMORY CARD NECESSARY

Version release:
- Product version: 04 Firmware version: V2.8.12 Software version: -

Product life cycle:
- Delivery release
- Product discontinuation
- Product cancellation
- Product discontinuation
Upgrading Programs

StepForward™

Technology Management Made Simple

The StepForward program offers promotional incentives for companies wanting to upgrade/migrate Rockwell Automation equipment. Call your local Rockwell Automation Distributor for applicable products and credits.

Trade-Up Program
<table>
<thead>
<tr>
<th>Manufacturers</th>
<th>Common Legacy Systems</th>
<th>Current Systems</th>
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<tbody>
<tr>
<td>Rockwell Automation</td>
<td>SLC 150 PLC 2 PLC 3 PLC 5 SLC 500</td>
<td>MicroLogix CompactLogix</td>
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<td>ControlLogix GaurdLogix</td>
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<tr>
<td>SIEMENS</td>
<td>S5 Series</td>
<td>LOGO! S7 Series</td>
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<tr>
<td>Schneider Electric</td>
<td>Gould/Modicon 984 Gould/Modicon 884</td>
<td>Modicon Quantum Premium</td>
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<td>Series 90-70 Series 1</td>
<td>M340 Preventa</td>
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<td>GE Intelligent Platforms</td>
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<td>VersaMax Micro VersaMax Modular</td>
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<td></td>
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<td>Series 90-30 PACSystem RX7i</td>
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<td>VersaSafe</td>
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<td>ControlLogix Controlwave</td>
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<td>Emerson Process Management</td>
<td>Bristol 3000 Series</td>
<td>Productivity3000 Direct Logic</td>
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<td>CLICK Series</td>
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<tr>
<td>Automation Direct</td>
<td>Koyo DL Series</td>
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## Design Considerations

<table>
<thead>
<tr>
<th>Design Questions</th>
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<tbody>
<tr>
<td>How do I identify my obsolete components that I need to upgrade?</td>
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<tr>
<td>How will I know what products to use?</td>
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<tr>
<td>How do I preserve my application code?</td>
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<tr>
<td>How do I change my controller without disrupting my current operations?</td>
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<tr>
<td>What happens to all of my operator interface screens?</td>
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<tr>
<td>What happens to my I/O?</td>
</tr>
</tbody>
</table>
Case Study #1 – East Liverpool

- Belt Press
- Non-Potable
- Main CPU
- Grit
- Raw Waste Water
- Clarifier
Design Considerations

• Separation Of Process Control and HMI And Data Collection Networks.
• Integration Of Membrane Cells HMI Control Into Existing SCADA System.
• Membrane Cell PLC Control and Local HMI Layout.
• Upgrade and Combine Support Systems Controls.
• SCADA Computer Centralization Improvements.
Case Study #3 – Albion
Important Information & Resources

• Trade-Up and Migration Programs
  • Rockwell Automation- Step Forward
  • GE Intelligent Platforms- Trade-Up
  • Most Manufacturers have these programs, have your supplier ask.
  • Stay updated on Product Lifecycle Lists

• Tips to Implementation of a System Upgrade
  • Find a trusted Partner to work with you through the entire process.
  • Assess, Develop a Plan, and Implement. Make sure all Design Considerations are accounted for.
  • Understand your needs and the value of having a system that utilizes current technologies.
  • Understand the Importance in moving away from a Legacy System.

Visit Booth #xx for our extended Information & Resources Hand-out
Questions?

Thank you for attending our presentation!

Visit us at Booth #xx

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