

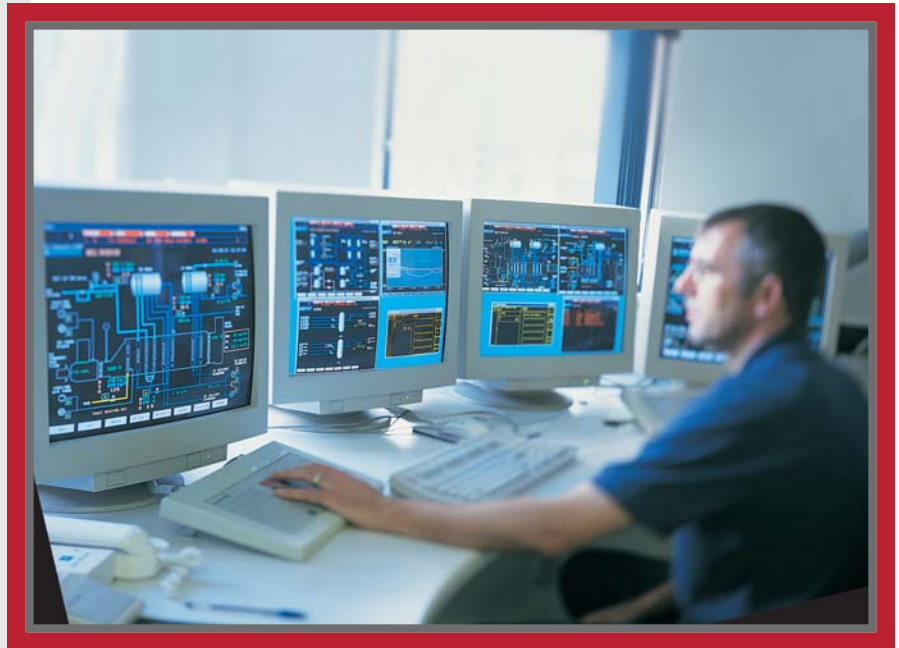
# CAPABILITY OVERVIEW

## LEGACY DCS CONVERSIONS

### IMPROVE RELIABILITY AND LOWER TOTAL COST

ROCKWELL AUTOMATION  
OFFERS COMPLETE LEGACY  
DCS CONVERSION PROJECT  
DELIVERY:

- Migration knowledge in a wide range of industries
- Unsurpassed technical expertise
- Knowledge and experience to help you understand the trade-offs between migration, upgrade, and replacement
- Outstanding support
- Extensive collection of migration tools we use to minimize your risk and your cost including:
  - Network interfaces
  - Conversion software and database utilities
  - I/O wiring reuse technology



When it comes to incorporating Legacy DCS migrations to achieve single plant control systems that enable full plant visibility, and seamless Business system connectivity - the question is no longer when, it's how?

How are you going to obtain the low risk conversion mechanisms by which all of your existing components can come together into a single, harmonious system?

How are you going to incorporate and reuse automation in the operation of operating systems including ERP, supply chain, and inventory replenishment applications?

How are you going to take your aging plant control a step beyond the process itself, by handling all of the major activities happening within a facility - from continuous regulatory control loops to batch sequencing to the discrete control operations of process plants like material movement, warehouse operations, and packaging?

Companies striving to achieve a competitive advantage in the global marketplace recognize and take advantage of the enormous potential within their facility. However, the path to higher productivity and greater profits is not always obvious. Now, while it's true that you, as a manufacturer can set up a migration agreement with virtually any industrial controls supplier, a legacy DCS conversion partnership with Rockwell Automation can help you stand apart from your competition, helping you improve reliability and lower total cost.

We understand that your goal is to make better business decisions and improve your business performance. By employing the leading technology and enhanced support solutions available from Rockwell Automation Process System Solutions, you get a partner that approaches your business challenges in a more business-like manner, helping you to focus on minimizing your operating costs.

It is not always easy to determine when you should migrate, upgrade or replace equipment. However, when you make the decision to change, it's vital that you do it without major disruption to your production and without incurring large installation or training costs.

By partnering with Rockwell Automation, you get a business and migration partner that is positioned to provide you with the best low risk migration, repair, or replacement consultation solutions. Rockwell Automation and its partners will work with you to develop and implement a plan that fits your control needs and takes into account both your short-term and long-term goals.

We can help you migrate all at once or in stages, at the pace that is comfortable for you and fits your budget.

Ultimately, the success of your automation project rests on the technical and project management skills of your system integrator's project team. When you work with Rockwell Automation, you get project management and system integration expertise that can help achieve your success. Your Rockwell Automation team includes project leaders, application engineers, expertise in DCS technology, and system and hardware designers – all with a level of unparalleled expertise in understanding your project and its unique system requirements, and is empowered to take action.

Automation equipment represents a major capital investment for you. That's why Rockwell Automation stands behind all of its solutions, continuing to sell products long after they're considered contemporary and providing global support services for an extensive time after the sale.

That commitment enables you to continually increase your return on automation investments while gaining a competitive advantage.

To help give you an eye towards the future, Rockwell Automation products are developed to be compatible with existing systems and can be easily adapted to work in future systems. This helps you retain control equipment value, insuring solid investments today and into the future.



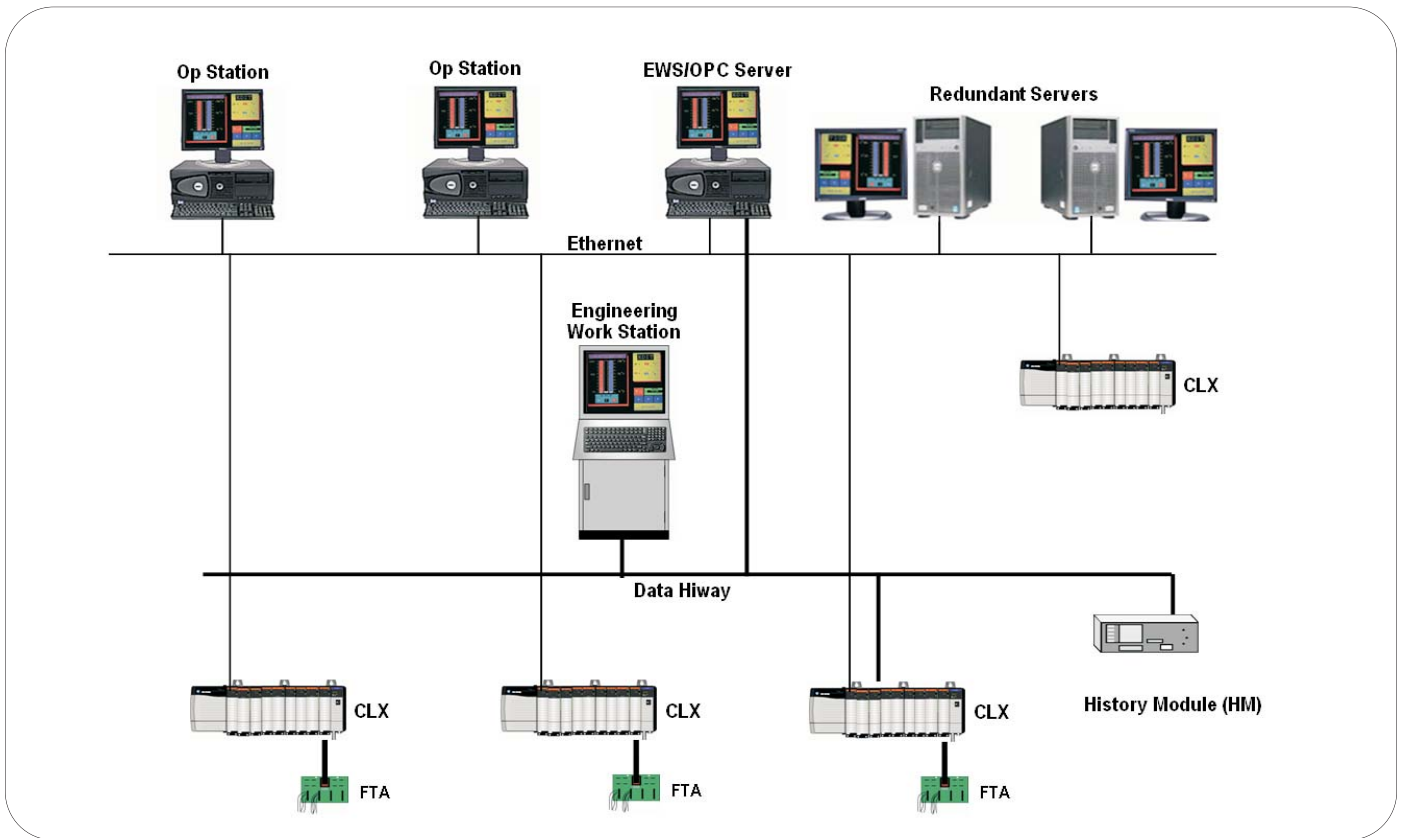


Figure 1- Example of Phase 3 DCS Migration Complete Conversion to Rockwell Architecture

**Benefits of using Rockwell Automation Team for your DCS Control System Conversion:**

- Extensive expertise in legacy DCS technologies and the use of the Rockwell Automation Integrated Architecture™ in ‘traditional’ DCS applications
- Ability to migrate in phases for targeted DCS systems minimizes risk associated with changing to a ‘new’ system. Interoperability of existing controllers and HMI with Integrated Architecture is fully supported for targeted systems.
- No need to throw away the customer’s previous investment when replacing their entire DCS with the Integrated Architecture from Rockwell Automation. Use existing field wiring and termination units connected via cables to Rockwell Automation’s 1756 I/O.
- Open, integrated architecture for increased flexibility
- Maximizing returns from existing assets through improved control and monitoring
- Re-use of engineering practices to help reduce development time and costs
- Easy access to plant and production data from business systems for better management decision-making
- Single environment for integrated motion, discrete, process and safety for total plant control
- Application expertise in Process and Plant Control in addition to DCS conversion expertise.
- The DCS conversion team bases many of their solutions on Rockwell Automation standard designs or includes standard features that do not require sophisticated software development from scratch. This approach minimizes the conversion investment.
- Operator displays provide more process information to the operators with I/O faceplates resembling the Legacy DCS System in appearance and functionality, thus greatly shortening any maintenance and operator learning curve. Also, the number of displays required to do the same functionality can be reduced, making the system easier to navigate and run by the operator.
- DCS conversion solutions employ field proven, ControlLogix and RSView products backed by Rockwell Automation commitment of continued long term support & supply.



- Common programming software used to create the application programs - simplifies future logic changes and reduces the number of software packages that must be supported by engineering.
- Audit services to determine best approach and migration scope. A complete report can be delivered in a format that can become the customer's RFQ
- Can provide Configuration Consistency Reports to confirm completeness of conversion and testing
- During this migration period, not only can existing consoles access ControlLogix™ information, but ProcessLinx allows peer-to-peer controller communications between ABB/Bailey, Fisher PROVOX, and Honeywell TDC Legacy DCS System Processors and the new ControlLogix processor.
- Provides full access to all automation equipment information from the Business System to the remote maintenance terminal
- The DCS conversion team uses Rockwell Automation products and being part of Rockwell Automation, they typically can solve architecture and product problems quicker than third party solution providers.
- Utilizes Industry standards for openness and longer life Network based (Ethernet, Foundation Fieldbus, DeviceNet) and Open communications protocol (TCP/IP, HSE, OPC)
- Full Service and Technical Support capabilities

If you are not able, or prefer not to migrate all at once, our conversion solution can be a three phased approach. The three steps in this phased approach would be:

- Phase 1 - Replace the Operator Consoles with new HMI PC Hardware & Software.
- Phase 2 - Begin replacing the Proprietary supervisory network with an open - high speed network.
  - Begin replacing Legacy Controller, IO, and functions.78,8%
- Phase 3 - Replace the remaining Legacy Controllers, I/O hardware and Engineering Work Station

### Value Of Phased Migration Solutions

- Provide low risk cut over solutions designed for short downtimes
- Provide full connectivity to all automation and production data
- Use modern process control platforms to enhance production capability, system reliability, and improve product quality
- Provide Operator Continuity

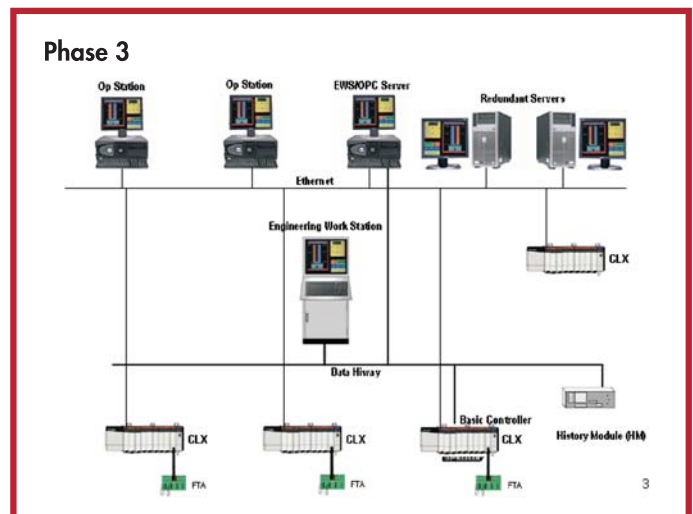
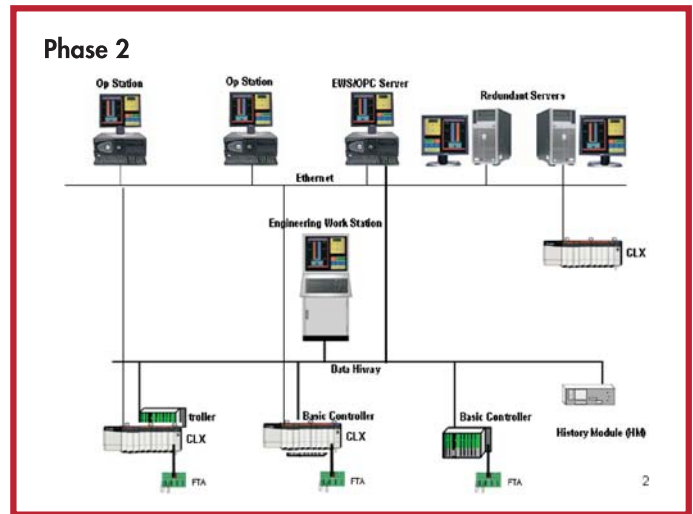
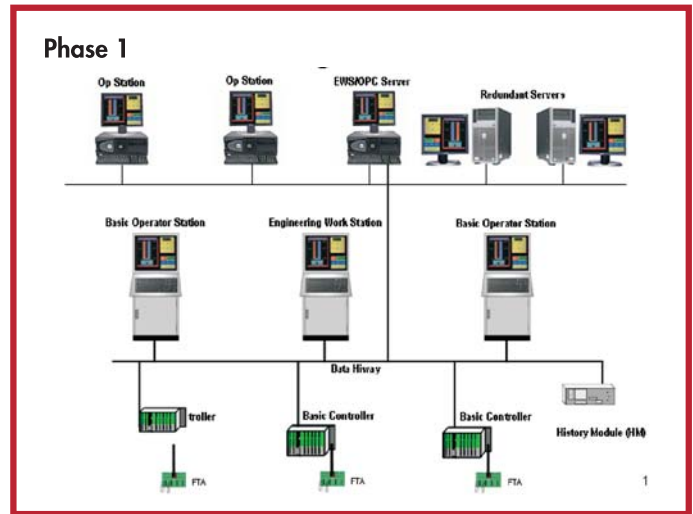


Figure 2- Three Phased Migration Approach

## Complete Legacy DCS Conversion Project Delivery Services:

- Graphics Conversion Services
- Legacy Console Replacement (Database Conversion)
- Legacy Controller Replacement (IO Scanners)
- Legacy IO Replacement (Custom Cables to Field Termination Units)
- Migration Planning and Analysis
- Configuration Conversion
- Advanced Control
- Retrofit/Migration Engineering
- Project Management
- HW/SW Integration
- Factory Acceptance Testing
- Documentation
- System Training
- Long Term Support
- Startup Assistance
- Installation

## Rockwell Automation Migration Tools we use to minimize your risk and cost:

- Database conversion from your current legacy platform console database to RSView SE tags
- Function Block Configuration specs exported to database
- Use your existing field wiring and termination units connected via cable to 1756 I/O
- Audit services to determine best approach and migration scope
- Configuration Consistency Reports to confirm completeness of conversion and testing

## Migration Support Tools:

- Existing communications and control architecture
- Existing console locations, graphics, reports, operator needs
- I/O module count by location and channel setup
- Database export from existing system
- Critical functionality interview with your staff
- Needs unfulfilled by the old DCS – improvements desired in new system
- Identify any installation or environmental restrictions

Many facility operators like yourself have been hesitant to move to the next level, but employ a system based on controls from another supplier – with components that may no longer be available or supported. At Rockwell Automation, we can help put those fears to rest with upgraded systems that are based on new technology, with solutions adapted to integrate into systems based on non-Rockwell Automation equipment. To be sure, we'll help control your costs by utilizing existing I/O, consoles and wiring wherever possible.

## Legacy Platforms that Rockwell Automation can convert:

- Bailey Net/Infi90
- Honeywell TDC 2000 and Honeywell TDC 3000
- Fisher Provox
- Moore APACS
- Taylor Mod 300
- Yokogawa Centum
- ProcessLogix

Rockwell Automation is continuously adding Legacy Platforms that we are capable of converting. Please contact us if you do not see yours here.

When it comes to incorporating legacy DCS migration to achieve full plant control and visibility, the question is no longer when, it's how? The answer is easy - contact Rockwell Automation. Learn how you can quickly migrate to newer technology while minimizing downtime and maximizing your operational success.

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