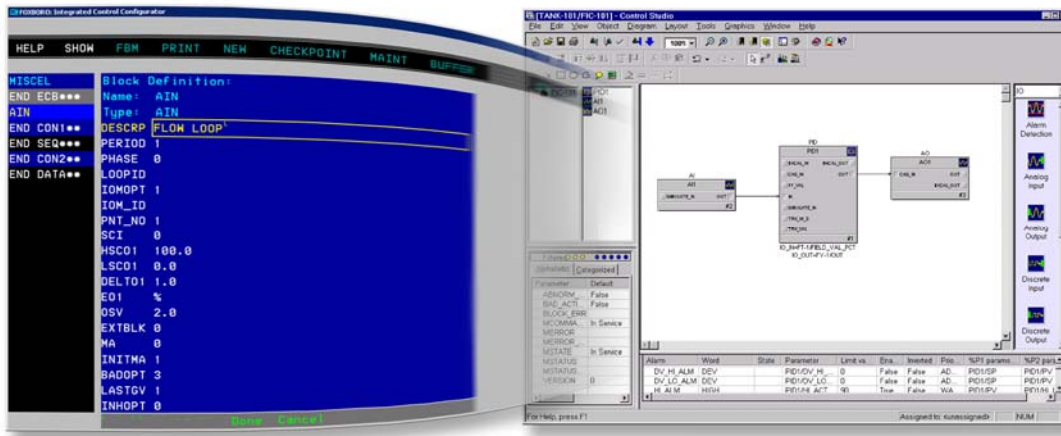




# Control Conversion Services—Foxboro I/A Series® to the DeltaV™ System



Foxboro I/A Series Compounds and Blocks

DeltaV™ Control Modules

## Highlights

- Emerson preserves your valuable investments in logic design and proven functionality.
- Emerson quickly and efficiently upgrades a Foxboro I/A Series® control database to a DeltaV control database.
- Engineers with both Foxboro and DeltaV™ experience ensure conversion accuracy and integrity.
- Use DeltaV loop standards or transfer your own plant standards for a smooth transition to the latest technology.

## Introduction

When modernizing your plant automation system from a Foxboro I/A Series to a state-of-the-art DeltaV system, accurate control and logic conversions are critical. Emerson offers migration services that will preserve your engineering investments and ensure that the new implementation functions as well as, or better than, the old. Applying conversion utilities, platform expertise and controls know-how dramatically reduces data entry errors and minimizes the risks associated with switching automation suppliers. The controls conversion yields a DeltaV database that is ready to take your process to a higher level of performance.



### Benefits

**Emerson preserves your logic design and proven control system functionality.** Emerson understands that the engineering investment in your current automation system represents a huge intellectual asset that has evolved over many years. Protecting the value of that asset is a top priority. Your new technology then becomes a platform for even higher levels of operational excellence.

**Emerson quickly and efficiently migrates an I/A Series control database.** Emerson's conversion utilities generate a set of standard DeltaV control modules directly from a Foxboro I/A Series database, thus reducing the risk of errors associated with manual data entry.

Auto-generation of detailed documentation to assist application engineers with configuration that must be manually converted is included. For example, user-defined sequence code must be designed to perform correctly using similar DeltaV function blocks.

**Expert engineers with both I/A Series and DeltaV implementation experience ensure the accuracy and integrity of the conversion.** Emerson has a wealth of experience in converting databases from many platforms, including the I/A Series, to DeltaV systems. Project teams adhere to global standard quality processes and each team includes domain experts who make certain the resulting control configuration meets or exceeds requirements.

**Use DeltaV loop standards or transfer your own.** Emerson provides a pre-configured set of library modules as standard. Optionally, existing plant loop standards can be integrated into the database to further reduce risk and training requirements.

### Services Description

**A typical controls conversion project includes the following steps:**

- **Analyze Inputs.** Emerson engineers first assess I/O counts and types, I/A Series function blocks, and application complexity. They verify that proposed DeltaV hardware and software meet the project requirements.

- **Project Kick-off.** Emerson personnel participate in a project kick-off meeting to review project scope, deliverables and schedules.
- **Agree on Standards:** Develop project configuration standards; for example, module naming conventions and whether to use Emerson's standard module library or specify modifications to certain modules.
- **Convert Loop Structures.** Applying pre-defined library module templates for common I/A loop structures, engineers automatically generate new DeltaV control modules. They generate modules for complex I/A loop structures from detailed documentation and graphical loop representations. The resulting DeltaV modules database is then ready to download.
- **Develop Configuration Solutions.** Applying I/A Series and DeltaV systems expertise, engineers convert user-defined code, ladder logic, batch controls and special purpose blocks to functional equivalents in the DeltaV system.
- **Test.** Download the complete DeltaV database and perform a functional test of each module type using simulation.

#### Optional services include these:

- **Site Services.** Automation system installation, commissioning and startup services bring your system online, to the full satisfaction of plant operations and management personnel.
- **Custom Library development.** Incorporating your plant control standards and strategies into the new DeltaV system is facilitated by Emerson's conversion utilities that allow for creating custom library modules.
- **Operator Training.** Emerson offers a comprehensive suite of training courses for operators, engineers and maintenance personnel. Traditional classroom, e-learning or custom onsite classes with hands-on practical learning exercises are available to satisfy all your training needs.



- **Simulation Services.** Simulation provides valuable feedback for verification of your database and logic configurations. Emerson engineers can help you thoroughly check the new DeltaV configuration with or without DeltaV controllers and I/O.

### Summary

By having Emerson transition your configuration, you keep your own staff's valuable attention focused on site priorities. The control conversion service expertly configures your new controllers, minimizes conversion risks, and maximizes engineering efficiency. The resulting DeltaV modules preserve the engineering of your I/A Series configuration and enable you to take advantage of the very latest in process automation technology with your DeltaV system.

