Course Description

Course Duration
The duration is 2 days.
The Course Starts at 08:30 and Ends at 17:00 each day.

Course Type
This is an instructor led course with interactive classroom discussions and associated lab exercises. Approximately 50% of the course is hands-on lab activities.

Course Goal
This course is an advanced extension to the T315 – System 800xA - Engineering. The goal is to give a thorough understanding of the PCDeviceLib library, its Control Module Types and their usage in Oil and Gas, and Pharmaceutical applications.

Student Profile
This training is targeted to application engineers, programmers and system integrators who wish to use the PCDeviceLib library and its module types.

Prerequisites and Recommendations
Students must have experience of System 800xA Configuration and Engineering. Students must have attended the course T315.

Course Objectives
Upon completion of this course, students will be able to:
- Explain the philosophy of PCDeviceLib and understand its place in project implementation.
- Understand the use of Project Constants for configuration of devices and other functions.
- Use the CMD editor to instantiate devices and interconnect using graphical connections.
- Use a variety of Input and Output devices
- Understand the role of PCC (Priority Commands and Interlock) Commands in an application
- Configure Alarms and Events for devices.
- Configure PCC actions for devices
- Design and implement shutdown logic for PCDevice subsystems at various levels
- Use logical gates, splitters and voters for PCC actions
- Configure process graphics using graphical elements from PCDeviceLib
- Interpret Faceplate and graphical information

Main Topics
- Libraries, Types and Instances
- PCDeviceLib data types and control module types
- Project and application structures
- Project Constants and configuration
- OPC connectivity, IO Status
- Priority Commands and Interlocks (PCC)
- Device Modes
- Implementation using the CMD Editor
- Alarm and Event configuration
- General structure of a device module
- Connections to a device
Main Topics (cont)

- Device Interaction Parameters
- Graphic Displays and Graphic Elements
- Faceplates
- PCC Logic and interconnection
- PCC Levels

- Function of the PCC Uploader
- Condition Displays

GB850 System 800xA – PCDeviceLib 5.0
Engineering

Course Outline

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