Course description

AR110
System 800xA with AC 800M
BMI Introduction

Course Goal

The goal of this course is to learn the modification of existing applications / projects using the Extended Automation System 800xA with AC 800M controllers. BMI Library dedicated programming.

Learning Objectives

Upon completion of this course, the participants will be able to:

- Explain the System 800xA architecture and the function of the different components
- Configure the AC 800M hardware and corresponding I/O's
- Describe the structure of application programs i.e. variables, libraries, programs, tasks
- Modify existing application programs by using BMI Library Blocks
- Setup the communication between controllers
- Load the controller and work in online mode
- Check the OPC connectivity to AC800M
- Navigate in the system and create new Objects / Aspects
- Modify Graphic Displays
- Manage and configure Alarm and Events
- Monitor Trends and configure Historical Data Collection

Participant Profile

This training is targeted to system engineers, commissioning and maintenance personnel, and service engineers who need have a foundation for maintenance and administration skills using BMI Library.

Prerequisites

Students shall know the fundamentals of working with Control Systems and have basic knowledge of Windows 7 and networking technologies.

Topics

- System 800xA architecture
- Engineering Workplace / Plant Explorer
- OPC Connectivity
- Application Structures
- AC 800M Hardware
- BMI Introduction
- BMI Library Contents
- BMI Library Programming
- Communication
- Alarm and Events
- Historian and Trends
- Graphic Displays
- Operator Workplace

Course Type and Methods

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 Duration

The duration is 5 days.

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Course Outline

Day 1

- Course Overview
- System 800xA Architecture
- Operation
- Engineering Workplace / Plant Explorer
- OPC Connectivity

Day 2

- Application Structures
- AC 800M Hardware
- Libraries
- Variables and Data Types

Day 3

- Control Modules
- BMI Library Programming

Day 4

- BMI Library Programming (Continues)
- Task Assignment and Memory
- Communication
- Alarm and Events

Day 5

- Graphic Displays
- Historian and Trends
- Operator Workplace

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