Course description

T335
System 800xA with AC 800M
PCEquipmentLib Implementation

Course goal
The goal of this course is to learn how to use the PCEquipmentLib (PCEL) library modules to engineer a complete automation project with the Extended Automation System 800xA. The participants will learn to identify each module and its correct uses.

Learning objectives
Upon completion of this course, the participants will be able to:
- Explain the purpose of each PCEL module and identify the correct uses
- Describe which modules can be used in a non batch project
- Identify which modules are suitable for the standard phase batch approach and which ones are suitable for a custom phase batch approach
- Explain the differences between the standard phase approach and the custom phase approach to a batch project
- Create a unit based on the BatchAdvTemplates unit using the PCEL phase template and EM template
- Create a unit based on the PCEL unit template for use in the standard phase approach to a batch project
- Configure exception handling for phase and unit based hold scenarios
- Use batch exception procedures as part of a unit error handling strategy
- Extend the PCEL templates to allow rapid project development

Participant profile
This training is targeted to project application engineers and channel partners.

Prerequisites
Students should have attended the course T315 “Engineering” and the course T307 “Batch Management” or have knowledge and experience associated with the content of these courses. Ability to work with PCDeviceLibrary is essential.

Topics
- Introduction PCEquipmentLib
- Timers and EqPrompts
- EqCore
- EqBasic templates
- EM templates
- Exception modules
- Equipment Driver concept
- Standard Phases
- Custom phases
- Equipment Driver EM templates
- Templates Unit
- Batch operations for standard Phases
- Exception handling
- Exception recipes
- Project specific templates

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
- Introduction PCEquipmentLib
- Timers and EqPrompts
- EqCore
- EqBasic templates

Day 2
- EM templates
- Exception modules
- Equipment Driver concept
- Standard Phases

Day 3
- Equipment Driver EM templates
- Templates Unit

Day 4
- Batch operations for standard Phases Vertical redundancy
- Exception handling GOOSE engineering in CCT
- Exception recipes

Day 5
- Project specific templates
- Customer specific training

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