Experion PKS: Fundamentals - Control Execution Environment Controller Implementation

Course Overview
Course number: EXP-2001R410
Course length: 4.5 days

Need to plan and implement your Experion® Process Knowledge System (PKS) C200, C200E or C300 Controller?
This course provides you the ability to perform the following Experion PKS System tasks:

- Build control strategies in the Control Execution Environment that can be applied to the C200E (Chassis and PMIO) and C300 (Chassis, PMIO, and Series C).
- Plan the C200, C200E and C300 controllers including the selection of appropriate I/O, redundancy and communications.
- C200E Series A and C300 Series C I/O configuration
- C200E and C300 Control Module configuration. This includes configuring Data Acquisition, Regulatory Control and Logic.
- Perform Checkpoint Save and Restore.
- MATH and Auxiliary Function Block configuration.
- C200E and C300 Sequential Control Module configuration. This includes the use of Steps and Transitions to implement process sequences.
- The use of PMIO in C200E and C300 control strategies.

The course presents the basic concepts and strategies needed to develop guidelines for effective and consistent planning of the system. It includes extensive hands-on lab exercises where you will build and configure a Control Execution Environment applicable to the C200, C200E and C300.

Course Benefits
Efficient planning and implementation of your Experion PKS
C200, C200E and C300 Controller

- Conceptual understanding of the C200, C200E and C300 controllers to enable optimum utilization.
- Design and configure the C200, C200E and C300 controllers for optimum control.

Course Delivery Options
- In-Center Instructor-Led Training.
- On-Site Instructor-Led Training.

Who Should Take This Course?
Experion PKS System Implementers

Experion System Engineering and configuration tasks can impact the following job roles. Other job roles performing these tasks could also participate.

- Experion System or Application Engineer responsible for configuring the controller, adding to or changing the controller configuration.

Prerequisite/Skill Requirements
Prerequisite Course(s)
None.

Required Skills and/or Experience
- Some would benefit by taking the EXP-02R410 (or previous release).
- Ability to navigate the Experion Station.
- Ability to call up point details, group details, and custom displays.
- Working knowledge of Windows Server 2008 R2 (64 Bit) and/or Windows 7 (64 Bit).

Desirable Skills and/or Experience
- Plant, process, and controls knowledge.
- Experience configuring DCS Controller.

Course Topics
You will learn how to...

- Recognize the role of the major hardware and software components and learn how data flows through the C200, C200E and C300 controllers.
- Plan the C200, C200E and C300 controllers.
- Select appropriate components of the C200, C200E and C300 controllers including processors, I/O and communications.
- Configure the C200E and C300 controllers including:
  o Hardware.
  o Control Modules, which incorporate Data Acquisition, Regulatory Control and Logic.
  o Sequential Control Modules which are used to control process sequences, such as start up, shut down and batch operations.
  o Checkpoint Save and Restore.
- Configure additional I/O functionality for Honeywell Process Manager I/O applicable to both the C200E and C300 controllers.

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Course Topics (Continued)

- Use Productivity Tools:
  - Bulk Build.
  - Bulk Edit.

- Perform Database Search operations:
  - Parameter search.
  - Where Used search.
  - Dangling / Missing Connections.

Additional Training

To increase your knowledge and skills, there are additional courses available from Automation College.

For more information and registration, visit [www.automationcollege.com](http://www.automationcollege.com).