Experion PKS: Fundamentals – C300/SCADA Troubleshooting and Maintenance

Course Overview
Course number: EXP-05C3S
Course length: 5 days
Need to maintain an Experion® Process Knowledge System (PKS)?
This course provides participants with a full understanding of both the hardware and software facets of the Experion PKS C300 controller and SCADA interfaces. Hands-on lab exercises, utilizing a full-functioning process simulator, comprise 70% of the course. Participants will be required to install, configure and commission I/O, and configure Regulatory Control and Digital Composite. Participants will learn safer and more effective troubleshooting procedures that not only consider the hardware (cards, cables, power supplies, etc.), but also the impact of the loop parameter settings, and automatic controls.

Who Should Take This Course?
Experion PKS Plant Maintenance Technicians:
• Required to make routine additions and changes to controls on C300
• Expected to troubleshoot C300 controllers and points
• Expected to troubleshoot SCADA connections and points
• Required to identify level one faults in other parts of the Experion PKS

Course Benefits
Builds confidence in maintaining your System
• Hands on troubleshooting
• Identify the spare capacity on C300 controllers
• Locate, analyze, and rectify faults associated with the C300 controller and SCADA points
• Analyze and localize faults associated with field equipment
• Respond to problems on the system

Prerequisite/Skill Requirements
Prerequisite Course(s)
• None
Required Skills and/or Experience
• Able to navigate Station application in Experion
• Working knowledge of Windows Server 2016 Standard and/or Windows 10 Enterprise
Desirable Skills and/or Experience
• Working knowledge of your process.
• An understanding of basic electrical concepts, test equipment, and drawing symbols
• Working experience with field instruments, electrical components, valves, transmitters, and basic instrumentation

Course Topics
You will learn how to...
• Build a C300 controller/Series C I/O
• Build and commission loops using a hardware simulator
• Typical loops include feedback, positioning and digital control
• Use Experion PKS displays to troubleshoot HC900 SCADA problems
• Troubleshooting with system displays to locate and rectify faults in C300 field connections, I/O, redundancy, power supply, and communications to server
• Use Experion PKS operating, configuration, and troubleshooting displays to identify (not rectify) network faults in FTE, Server, Station, and Security connections
• Review the troubleshooting, diagnostic, and correction process for faults using 1-5v, 4-20 mA, and HART (Not included: Fieldbus, Profibus and DeviceNet)
• Perform routine maintenance on the C300
• Utilize PDF Collection to look for additional information to support these tasks

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

For more information and registration, visit

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