Course Overview

Course number: EXP-1003
Course length: 8 days

Need to understand installation, migration, and troubleshooting concepts and actions necessary for an Experion® PKS system connected to a TPS/TDC3000 System?

This course provides participants with the information and ability to install, migrate and troubleshoot both the hardware and software of an Experion PKS system connected to the TPS/TDC3000 System with HPM Controllers.

- Participants will be introduced to the architecture of the Experion PKS system with connection options to the TDC LCN system. Included are best practices and migration tips.
- Participants will be introduced to the advanced architecture of the Experion PKS-TPS system with new components like EHPM/ENIM with EUCN interface along with Enhanced TPS-Nodes (ETN), ELMM.
- Participants will learn safe and effective troubleshooting procedures along with improved navigation skills of system displays and programs.
- Participants will gain valuable skills through hands on migration of HPM points, CL programs, and US-GUS graphics to HMI displays. Diagnosing the problems encountered along the way and an overview of troubleshooting resources available in the system.
- Participants will learn basic concept of HPM to EHPM and NiM to ENIM software/Hardware Migration along with HG to EHB Migration concept.
- Students study in a Team System Environment -- three students per team. Hands-on lab exercises comprise 75% of the course.
- Each Team System Environment includes a Domain Controller, redundant ESVT nodes, ACE-T node, EST node, OPC Server, redundant HPM controllers, HC900 SCADA controller and redundant C300 controllers with C300 and PM I/O.

Course Benefits

Builds confidence in migrating and maintaining your System

- Gain knowledge on migrating your TDC system to Experion PKS
- Learn common problem causes and resolutions
- Explore migration path from HPM to C300 controllers using the existing PM I/O modules and field wiring
- Explore AM CL migration to C300 and ACE-T Sequential Control Modules and Custom Algorithm Blocks

Course Delivery Options

- In-Center Instructor-Led Training

Who Should Take This Course?

Experion® PKS / TPS / TDC 3000 Plant Engineers or Advanced System Technicians:

- Responsible for migrating the TDC/TPS System to the new Experion HMI system and Controllers
- Responsible for troubleshooting and correcting problems in the entire system from the Domain Controller, Servers, and stations to the primary controllers

Prerequisite/Skill Requirements

Prerequisite Course(s)

- (EXP-02 or EXP-02-AT or EXP-02-VT) or
- (EXP-05 or EXP-05-AT or EXP-05C3 or EXP-05C3S or EXP-05C2) or
- (EXP-23 or EXP-23-AT) or
- (((TDC-3300APM or TDC-3300APM-FT) or (TDC-3300HPM or TDC-3300HPM-FT) or (TPS-5722 or TPS-5722-FT) or (TPS-4750))

Note: Related experience may not be an acceptable substitute.

Required Skills and/or Experience

- Working knowledge of Windows 2008 Server SP1 or Windows 7

Desirable Skills and/or Experience

- Plant, process, and controls knowledge
- Experience configuring DCS Controllers
- Working knowledge of your process.
- Working experience with field instruments, electrical components, valves, transmitters, and basic instrumentation.
- Experience with installation and operation of an Experion PKS system
Experience with installation and operation of an TDC 3000/ TPS system

Course Topics

- Experion PKS-TPS System Architecture with new components like ENIM, EHPM, ENB, ELMM, ETN
- Experion TPS system Configuration including EHPM configuration in control builder
- TDC System Migration to Experion Information, best practices and migration tips
- Migration concept of HPM/NIM having UCN interface to EHPM/ENIM having EUCN interface
- Troubleshooting controller to field instrument type problems
- TDC 3000 HPM information – error indications - Local LED’s and Station Displays
- C300 information – error indications Local LED’s and Station Displays
- PM I/O information (either HPM and C300 connected) - error indications - Local LED’s and Station Displays
- TPS/LCN – Experion communication and connection displays and overview
- Experion System Logs and Analysis Tools
- Server and Security issues
- Station and Server redundancy overview
- EMDB and ERDB overview
- Network Tree and Analysis Tools

Additional Training

To increase your knowledge and skills, there are additional courses available from Automation College.
For more information and registration, visit www.honeywellprocess.com/en-US/training.