The single most important factors in using SmartPlant Instrumentation effectively are Well Trained Users!

With the enhancements to SmartPlant Instrumentation 2016 the need to re-address our training requirements for users to use the new features and take advantage of some of the older functionality that will enhance the user experience

This presentation will introduce you to some of the elements and procedures to consider when setting up your SmartPlant Instrumentation 2016 training program
Reasons for SPI 2016 Training

- Consider your reasons for having a SPI 2016 training program
  - Update training for new features and functionality in SPI 2016
  - Consistency in the use of SPI for Projects or Operations
  - Optimizing existing functionality of SPI by the users
  - Expanding the work processes to better use SPI
  - Maintain the quality of your SPI Implementation

- This presentation will introduce you to some of the elements and procedures to consider when setting up your SmartPlant Instrumentation 2016 training program
SPI Training Requirements

- Target Your SPI training audience
  - Introductory Training for New SPI users
  - Update Training for existing SPI users
  - Module Training for specific users
  - SPI Administration Training

- Supplemental or Focused Training
  - Instrumentation Training
  - CS Engineers
  - CS Designers
  - Process Engineers
  - Process Tech
  - Maintenance
  - Operations
  - Management
SPI Training Formats

- Consider the most viable formats for your training program
  - Presentation type Instructor Led Classroom training
  - Hands on Instructor Led Classroom training
  - Self Paced Online Based user training
  - Lunch and Learn short sessions
  - Just in Time user training
  - One on One user training
  - On the Job user training
  - Guest instructors
  - Outside classes
  - Combination…
SPI Training Costs

- Establish and Maintain an SPI Training Budget
  - Based on Onsite or Offsite training
  - Is SPI Training Project Billable?
  - Included costs for SPI training
    • Preparation of materials
    • Software Licensing
    • Accommodations
    • Hardware costs
    • Trainers Time
    • Student Time
    • Travel Time

*Training is not a cost. It's an investment!*
SPI Training Instructors

- When Developing or Hiring SPI Training Instructors
  - Consider the Trainers knowledge Base
  - Look for Outside Training resources
  - Develop Super Users as Trainers
  - Develop Specialty Trainers
  - Train the Trainers

- What Instructors Should Know
  - Instrumentation
  - The SPI Software
  - They are also Learning
  - Practice makes Perfect
  - Be passionate about SPI
Intergraph Training Programs

- Instructor Led Training
  - Huntsville, Alabama
  - Norcross, Georgia
  - Houston, Texas
- Conference Workshops
- Virtual Online Training
- GetSmart! Webinars
- TestDrive Center
  - SPI 2016 Pending
Intergraph Instructor-led Training

- SPI 2016 Update Class (TINT1005) (Pending)
- SPI for Users (TINT1001)
- SPI Installation and Administration (TINT1003)
- SPI Customization & Management (TINT1004)
- SPI Advanced Wiring & Reporting (TINT1006)
- SPI As-Built/Operating Owner (TINT1007)
- SPF Authoring and Administration (TSPE4500)
- Smart 3D Virtual Training 2014 (SDVT073AE)
- SPEL Basic User (TELE1001)
- SPEL Advanced User (TELE1002)
Intergraph Conference & Workshops

- Intergraph can do custom training and hands-on workshops for clients and at events such as HxGN and User Conferences
- HxGN LIVE 2016 Hands-on Training
  - 2254 - Minimize Downtime When Upgrading to the New SmartPlant Instrumentation 2016
  - 2253 - Reduce Risk and Cost with Vendor Interfaces in SmartPlant Instrumentation
- SPI 2016 Beta Test Workshops
  - SmartPlant Instrumentation 2016 Query Builder
  - SmartPlant Instrumentation 2016 Engineering Data Editor (EDE)
  - SmartPlant Instrumentation 2016 Projects As-Built
Intergraph Online Training Programs

- **Intergraph Virtual Training**
  - Intergraph Smart™ 3D Virtual Training
  - SmartPlant® P&ID Virtual Training
  - SmartPlant Electrical Virtual Training (Coming Soon)
  - SmartPlant Instrumentation Virtual Training (Pending)

- **Intergraph Webinars**
  - Efficiently Manage Projects with SmartPlant Instrumentation
  - Enhancing Your Loop Diagrams with SmartPlant Enhanced Smart Loops
  - SmartPlant Instrumentation Technical Update
  - Much More…
Using the SPI Internal Tutorial

- The SPI 2016 Documentation comes with a complete and comprehensive tutorial.
- The SPI Tutorial is based on the In_demo.db database installed as a stand alone Sybase or an Oracle or SQL Server.
- Recommended supplemental material includes:
  - *SmartPlant Instrumentation User's Guides*
  - *SmartPlant Instrumentation Online Help*
1. Administration Tasks
2. Getting Started with SmartPlant Instrumentation
3. Creating Instruments and Control Loops
4. Query Builder and the Engineering Data Editor (2016 Update)
5. Defining Process Data
6. Performing Calculations and Sizing
7. Working with Specifications
8. Managing Documents
9. Performing Wiring Operations
10. Generating Loop Drawings
11. Working with Hook-Ups
Query Builder and the Engineering Data Editor

Query Builder
- Create a basic query, save the query to the Reference Explorer, and preview the query
- Generate an EDE View from a Query, save the EDE View to the EDE Explorer

Engineering Data Editor
- Manipulate the data in the EDE View
  - Sorting Data
  - Applying Filters
  - Grouping Columns
  - Copy and Paste Functions
  - Search Functions
- Working with the Complex Filter
Query Builder (QB) Tutorial

- Query Builder (QB)
  - Using a query from the Reference Explorer
  - Item Types Explorer
    - Selecting Item types
  - Definitions Window
    - Defining relationships
  - Using the Attribute Explorer
    - Selecting Attributes
    - Adding Attributes
  - Previewing the query
    - Working with Filters
  - Saving the query to the Reference Explorer

SmartPlant Instrumentation Tutorial
Engineering Data Editor (EDE) Tutorial

◆ EDE Module Introduction
  – Using the EDE Explorer
  – Creating a New EDE
  – Edit the EDE Layout
  – Edit Data in the EDE
  – Using View Actions Tab
  – Using the Compare Option

◆ Manipulating the Data in the EDE View
  – Sort data in their columns
  – Applying filters to columns
  – Grouping columns
  – Copy/Paste from column to column
  – Search functionality
Projects As-Built (PAB) Tutorial

- The other Major change in SPI 2016 is the Projects As-Built To-Do List
- The Users Guide for PAB is in the “SmartPlant Instrumentation Detailed Engineering User's Guide”
  - Working with As-Built and Projects
  - As-Built Workflow
  - Claiming from As-Built
  - Releasing Claimed Items
  - Deleting Items from As-Built or Project
  - Merging Items with As-Built
  - Comparing Project To Do List with Target Data
  - Correlating Items in the As-Built
Customizing Your Training Program

- The SPI Tutorial is limited and will probably need to be supplemented with additional modules. Courses as required:
  - Special classes based on upgrades: Update training, New feature training etc…
  - Special classes for specific users: Process, Design, Maintenance etc…
  - Special classes for specific tasks: Fieldbus, Spec Sheets, Process data etc…
  - Special classes scaled to purpose: Lunch & Learn, Manager training etc…
  - Special classes for consistency: Seed and Standard practices training etc…
  - Special classes for additional modules: External Editor, Import Module etc…

- By customizing your training program with a combination of outside instructor led training and internally developed user training, you can make your SmartPlant Instrumentation implementation more effective.
Intergraph will hold SPI 2016 Update training classes in Houston in the near future

The courses will be more comprehensive than the SPI Tutorial in the Documentation

Major Topics Covered will be:
- Updating to SPI 2016
- Query Builder
- Engineering Data Editor
- Projects As-Built
- Integration To-Do-List
- Additional Functionality
“To register for training on all Intergraph Process, Power & Marine products, call Training Registration at (800) 766-7701 in the U.S. Outside the U.S., call (256) 730-5400 or contact your local Intergraph office”

“For current information on training, use a Web browser to connect to: http://www.intergraph.com/ppm/training/”
“It's all about training smart”

~Tyson Gay

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