

SmartPlant Instrumentation Technical User Forum P2C2 (Houston SPI TUF) Meeting	November 12, 2013 7:30 am Jacobs Engineering
---	---

Attendees	32 Members in attendance 11 Online Connections		Copied To	Houston SPI LTUF Website
------------------	---	--	------------------	--------------------------

Called By	John Dressel	Prepared By	Betty Alexander & John Dressel
------------------	--------------	--------------------	--------------------------------

Item	Topic	Notes	Action/Due
1	Welcome	Welcome to Jacobs & Safety Moment John Bolmanski, Jacobs	
2	Chairman's Notes	<p><u>John Dressel, Fluor</u></p> <ul style="list-style-type: none"> • John queried attendees on various modules and functions of SPI they use and pointed out that the majority of users only use a fraction of the capabilities of the software • Intergraph was supposed to do an SPI product update but were unable to connect. <p><u>Minutes from prior meeting were approved.</u></p> <p><u>Introductions were done.</u></p> <ul style="list-style-type: none"> • Jacobs, Mangam, AMEC, Fluor, Technip, Stone & Webster, FW, Dow, Rolta, CB&I, Others... • On phone: Lubrisol, Phillips66, Others... 	
3	Presentation	<p>Getting More Out of SmartPlant Instrumentation John Dressel, Fluor</p> <ul style="list-style-type: none"> • Process Module – <ul style="list-style-type: none"> ○ Process Data needs to be entered by Process Engineers; ○ Hardly any companies uses it by process engineers; gives process engineers ownership of the data. ○ 12 levels of alarm ○ Entry in the process module will populate to the DCS Alarms • Calculation Module – <ul style="list-style-type: none"> ○ Batch calculations; ○ Basis of calculations are also published. ○ Relief valve calculations is cumbersome • Hook-up module – <ul style="list-style-type: none"> ○ Hook-up modules are being used more; ○ seed files come with standard; ○ BOM is generated. ○ Assemblies used by some, ○ Fluor used to use UDFs. ○ Now Fluor likes Hook-Up ○ Seed files & BOM - Viable Functional part of SPI • Calibration Module - <ul style="list-style-type: none"> ○ Primarily used by Owner/Operator. ○ Calibration Recording is set up, ○ Trace-able & Auditable. • Maintenance Module - <ul style="list-style-type: none"> ○ Also used by mainly owners; ○ Preventive maintenance • DDP Module – <ul style="list-style-type: none"> ○ If you use Smartplant 3D Module, especially useful 	

Item	Topic	Notes	Action/Due
		<ul style="list-style-type: none"> ○ Allows piping to begin early on the project ○ Especially when using SP3D for Inline Instruments ○ Vendor info & built in Group ● Maintenance Module - <ul style="list-style-type: none"> ○ Also mainly O/O: ○ Work Requests & Logs ... ○ SAP interface ● Document Binder – <ul style="list-style-type: none"> ○ Most people HAVE used it successfully only engage it LATE in SPI for final deliverable combinations ○ Attaching external docs Browser's will be more powerful in 2015 ● Reference Explorer – <ul style="list-style-type: none"> ○ Can be utilized better to optimize the Explorer ● Macro Expansion - <ul style="list-style-type: none"> ○ Can be used in loop templates ○ SPI build instruments further than P&ID ● Import Utility – <ul style="list-style-type: none"> ○ Can be used for wiring imports; ○ Value with Specs and Wiring perhaps ○ NOT USED FOR NEW TAGS ● Merger utility – <ul style="list-style-type: none"> ○ Database Merger issues in newer versions ○ Room dislike, but CoP has positive experience ○ Separate domain Mergers bad. <ul style="list-style-type: none"> ▪ Eng_Ref_ID has poor collection for Multi projects. ▪ Merge_Release_Flg bad with Interfaces ○ Might be fixed in 2015. ● Symbol Editor for Smartsketch <ul style="list-style-type: none"> ○ Allows starting points for symbols ○ Telecommunication module symbols aren't very good. ● Telecom Module – FREE – <ul style="list-style-type: none"> ○ Working with Coax and Fiber Optics ○ Disadvantage - Point to point is primitive. ● IS and FF Validation – <ul style="list-style-type: none"> ○ Calculations should be used done on worst-case scenarios. ● External Spec Editor – <ul style="list-style-type: none"> ○ Used to export datasheets to outside vendor. ● External Editor for Process – <ul style="list-style-type: none"> ○ License required ○ Needs to import back into process ● Many additional Options & Functions... <p>Q&A</p> <ul style="list-style-type: none"> ● O/O presentation pending someday for Maintenance Module ● Reminder Reference Library & Terminator Need for FFB Validation 	
4	Presentation	<p>Using SmartPlant Instrumentation's Rule Manager Nezar Faitouri, Mangan</p> <ul style="list-style-type: none"> ● Rule Manager is enable in Admin Module 	

Item	Topic	Notes	Action/Due
		<ul style="list-style-type: none"> • Triggers when using SPI • Workflow is turned on <ul style="list-style-type: none"> ◦ Process data can't be changed ◦ Use SPEC_UDF instead of CV_VALVE_TYPE_ID • Supports only Governing Cases • Can flag I/O changes when CS tags is created • Once Model Number is set; don't change. • 2015 EDE Might be more functional with Rule Manager. • ! TESTING Needed before Enabling Rule • ! Manipulation of spaces in tag names can be done, but breaks some other functions • ! More Rules can be made via Visual Basic, but: <ul style="list-style-type: none"> ◦ Creates DLL ... for local installations ◦ ALL machines must have the DLL or the Rule fails. ◦ Pop-up message. ◦ Via Citrix this DLL can be put with the INI file • Discussion on ID fields for cross table (like UOM) sometimes full text versus ID field. <p>Q&A</p> <ul style="list-style-type: none"> • Rules are enabled when users log-in and log-out • Can use Visual Basic for Rule Manager – creates DLL files that needs to be used in each machine 	
5	Presentation	<p>SmartPlant Instrumentation V2013 Upgrade Ron Jackson, Fluor</p> <ul style="list-style-type: none"> • Oracle 11.2.02, Patch 8, Character Sent to DBA • After upgrade run "Synchronize.pd" – Process data fix • Most users use Oracle • Clean CheckDB before and after; didn't have to go to Intergraph • 2007 upgrade must be bumped thru 2009 SP2 ... All 2007/9 was in Oracle 10G • Issue: upgrading across SPI and Oracle at same time • Intergraph recommends specific Options, Pros and Cons with both • Note: Search for "Alter System" in Install Guide to get Intergraph SQL statement to overcome the Case Sensitivity of SPI 2013 (which otherwise may Restrict LOGINs!) • Synchronize PD script to fix Process Data problem in SPI2013 upgrades (see old Nezar presentation) • 2009 & 2013 do NOT work well on same machine. (Oracle 11G 202 patch 8) • SPF Integrated SPI 2013 does work. 	
6	Presentation	<p>Process Data in SmartPlant Instrumentation John Dressel, Fluor</p> <ul style="list-style-type: none"> • Control Systems is the Process Engineers client • Control System should handle line numbers • Process Data Tutorial is available in the SPI Tutorial • P&ID = "Process and Instrument Data" not Diagram • Hard Copies with signatures are kept for ISO audits 	

Item	Topic	Notes	Action/Due
		<ul style="list-style-type: none"> • SOFT Tags aren't kept in SPI (FLUOR); <ul style="list-style-type: none"> ○ Creates mismanagement of data ○ Alarms on transmitter are carried with I/O signal • Process UDF's are recommended not used. • Fluor Spec sheets have process data notes on Notes Page • Interfaces doesn't handle multiple cases (Vendors) • Line imports doesn't have the same process conditions from one end to the other • Profiles need to process data not required have to be updated • Transmitters need Process Data as part of the HART Protocol • Line data should only contain those with instrument attached • UOM table update PSI to PSIA and PSIG • Good for Process folk to picture their data Customer is the Internal Control Systems group. (not external client) • Control Sys people need to make the Process folk's job easier (by handling line data well & TRAINING) • Old Dogs <> New Tricks philosophy needs to be overcome. Fluor fixed by moving people as well as workflows. • P&ID Folk NEED to have better Process Data in the formerly thought of Piping and Instrument Diagram. • Process Department Like to have Secure Access and Change Management to Control their Data. (Different rights & Different Rights - Supplemental training, Seats & detailed work process) • SUGGEST: From Fluor & agreed by Honeywell ... Separate Soft Tags in Index etc can be dangerous due to split Alarm Data and Solution can be to use Process Data Module Alarm fields more fully with the core Field Instrument. • PD Fluid Properties Lookups Very Valuable. • Instrument Type is Controlling factor for Process Data Workflow / Requirement • Process Data is owned by the Transmitter in Smart Loops. • Advice: Only put Lines in SPI with Instruments on 'em. No Need to have HUGE & Useless Line List. • Browser Module BYPASSES many Rights and Controls set for the Process Data Module. <ul style="list-style-type: none"> ○ Editing = Dangerous ○ Also - Do NOT edit Process Data from Within Spec Module DataSheets <p>Q&A</p> <ul style="list-style-type: none"> • Sizing in Calculation Module – Sizing is for all vendors; • Conval – Different vendor valve catalog/flags for vendors that calculation will select - John will try to find reference 	

Item	Topic	Notes	Action/Due
		and publish online.	
7	Forum Topics	<p>Forum Topics All Attendees</p> <ul style="list-style-type: none"> • SPI DDP Module – How many members ~6; <ul style="list-style-type: none"> ○ Valid tool in the environment; ○ lack of documentation; ○ Scott Ambrose supports for training; , ○ Expensive Intergraph training; ○ Version 6 – Outlet valves was bigger than Inlet for PSV. ○ SmartPlant 3D uses VB not Eden symbols; ○ Tips or Tricks – works with EDEN symbols; ○ Saves time for Piping • SPI Hook-Up Module – Half of group; <ul style="list-style-type: none"> ○ Generating the drawings automatically; Using minimal; ○ Client Hosted databases often use Hook-Up module. ○ Most folk use it in Simple mode (dumbed down version reference only - NOT using Drawing Generation function) ... not extended functions. ○ CAN have separate Library (exports easily and can be imported) ○ Tips and Tricks – Database as Library and use it to import to other projects. Fluor is using it. • SPI Integration – SPF – some users; <ul style="list-style-type: none"> ○ Outside of SPF – few users; more common for SmartPlant P&ID; ○ Integration Outside is more prevalent. ○ Hexagon Conference showed MANY customers using external Mapping Integration. ○ More prevalent with SP P&ID, due to poor naming conventions and Instrument Type mapping to SPI. ○ Fluor success with SPF integration especially with SPEL, and somewhat into the SP3D model for cable management & reports. ○ Intergraph does NOT have a consistent means of mapping Instrument Types across SPI & SPP&ID. ○ Abbreviated P&ID Symbols are bad for Integration. ○ FW implemented the Instrument Types into P&ID - (SmartPlant Engineering separate tool is promoted as controlling access.) ○ Extra Training needed for P&ID folk to learn SPI logic. ○ AMEC using external tool due to non-use of SP P&ID tool. 	

Item	Topic	Notes	Action/Due
		<ul style="list-style-type: none"> ○ Question provoked: Comparison Reports between SPI & SP P&ID mentioned as possible useful. ○ Macro Expansion quoted as useful to restrict duplicate tag creation. ○ Hopes for future SmartPlant being more Data Centric; ○ True Data Centric Environment – common environment ○ Sunflower Project – Data stays in the tools but can view reports in one environment. ● SPI Version 2013 – <ul style="list-style-type: none"> ○ Duplicate tags doesn't have to re-select the instrument types; ignoring the instrument type to bring them from the source data ○ CR; NOTE: eCustomer site from Intergraph is about to be revamped and become More flexible and functional. (mid Dec target) ○ Problem noted with SPI3013 on Windows 2008 server with DLLs. ○ Intermittent problem with "Draft.exe" and Windows 2008 - related with Security Patches) Problem is reportedly NOT with Intergraph, and blamed on Windows. ● SPI Version 2014 – <ul style="list-style-type: none"> ○ Now called 2015, to be released mid to late 2014. ○ EDE not need InfoMaker, but SPEC Browser will still need InfoMaker as SPI Spec Module will not be upgraded until 2016 timeframe. ○ John is helping with their targeting initiative to Fix their Spec Module (normalized with less broken Spec_Udfs. New requests - Folk are not embracing Smart Sketch Cad-type drawing generation, moving away from Enhanced Report Utility, and back to ACAD (which is Licensing issue but possible on Thin Client/Citrix) ○ SPP&ID conversions issue in past ... CAD integration is not functional. ○ SPI Loop Generation will HAVE to go back to CAD for certain Clients. ○ Works well for SPI, but SPEL gen does Not go well to ACAD, due to Enhanced Report ○ Utility restrictions. Isometrics and Cable Management ok , but One Line diagrams NOT possible yet. ○ John motivating Push to have more EXCEL reporting. SPEL good for that. SPI is good with Excel output, except for SPECS. ○ SPI Spec to PDF and then translated to Word or Excel. ○ Some Good News that EDE will allow some limited editing of Specs in Browser ... but NOT reporting to EXCEL. ● Other SPI Topics – <ul style="list-style-type: none"> ○ More CAD type of environment instead of Smart 	

Item	Topic	Notes	Action/Due
		Sketch environment; <ul style="list-style-type: none"> ○ CAD can now support thin client; ○ SPI to PDF to Word works great for spec sheets; ○ To-Do list more comprehensive; ○ Performance issues in SPF. ○ External Editor issues on Citrix – Mapping to temporary folder. ○ Publish/Retrieve on P&ID takes a long time to Publish; ○ License Manager –Corrupt license file/annual renewal; Group doesn't have issue. ○ SPE – Smart Plant Explorer – Fluor doesn't use; Not well documented. ○ Citrix for globalized environment depending on number of users; ○ Citrix Zenapp is latest for published documentation; Re-ping SPLM licenses; ○ Reminder that Oracle has issues with false data (dashes and spaces in fields) creating more data Size with poor quality. ○ Slowdowns fixed when History Data is removed. ○ Citrix related issues also found with poorly mapped folders and back-n-forth processing of data. 	
8	Close	<ul style="list-style-type: none"> • Next meeting will be hosted by Mangan on February 11, 2014 to focus on Owner Operator Issues • John Dressel closed meeting and thanked Jacobs for Hosting 	