SmartPlant Instrumentation Technical User Forum P2C2 (Houston SPI TUF) Meeting				**November 13, 2007 8:00 am WorleyParsons**	
Attendees	42Members in attendance 4 Online meetings		**Copied To**		
Called By	John Dressel		**Prepared By**	John Dressel	

Item	Topic	Notes	Action/Due
1	Welcome to WorleyParsons	- Daryl Konen, Opened the meeting and welcomed everyone to WorleyParsons	
2	Chairman's Notes	- Thanks to Daryl Konen and WorleyParsons for hosting the meeting and the presentations. - Thanks to members and guests for attending this meeting of the Houston SPI LTUF. - John Dressel spoke on using SPI automation to assist companies during the current business upturn. He pointed out that the automation features of SPI can speed the handling of data and allow companies to be more productive with less people. - - Upcoming conferences: - Instrumentation Symposium – January 29 – 31, 2008 –Texas A&M University - Intergraph 2008 – June 2 – 5 -- Las Vegas, Nevada	
3	Minutes	- Minutes of last meeting approved	
4	Introductions	- Each member stood and introduced themselves and spoke of what their utilization of SPI is. - Welcomed several members who connected into meeting with Webex (Aramco, Saudi Arabia and Burns and McDonnell, Kansas City)	
5	WorleyParsons Presentation	- Luke Helwig of WorleyParsons gave a brief overview of the company with History and business units.	
6	Analyzer Presentation	- John Bolmanski of Jacobs gave the following presentation: - Using Analyzers in SmartPlant Instrumentation - To create Stream based Analyzer Datasheets - - First, working With the Line Number - - 1. Add the Line to INtools. One way is in the Index Module using the Line Dialog Box. - 2. Once the Line is added, the Fluid components must be associated with it. Open the Process Data module and pick the Fluid Components item of the Edit menu. - 3. Enter the Components of Interest. - 4. Open the Process data for the Line, and select the Line Components item from the Edit menu.	

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6	Analyzer Presentation (continued)	- Add One or more Components of Interest. - Close and Save the Process Data changes. - - Adding the New Tags - - 1.Add “AT” to the Index and make sure that the line is associated to the instrument along with the Loop, P&ID, Service, Location, I/O, and Status. - 2. Open the Process Data module. - 3. Click on the Instrument button to open the Process data for the “AT”. - 4. Set the Fluid State and select Complex. - 5. Add the Stream and Component tags by clicking the “ADD” button next to each box. - “A” is the instrument type for the Stream, and “AS” is the instrument type for the component. - Make sure that each tag is associated with the loop and has data for the Service, P&ID (both provided from Loop), Line number, Status and Location. Add all components of interest for each stream with the associated stream selected. - 6. The new tags will appear in the boxes. Click OK. - 7. Now select the component half way down the Process Datasheet. Select the line component, and enter the measured range (can be done later on datasheet). Enter other data as required and close the process datasheet. - 8. Open the Specification Module, and open the spec for the AT. Remember – these are legitimate Tag Numbers so they can have Specification Sheets. Fill in the required data. - 9. Repeat for each Stream Tag - 10. Repeat with each Component of Interest - - The different versions of Smart Plant Instrumentation 7 - SPI V7 Service Pack 8 - SmartPlant Instrumentation 07.00.08.02 - SPI V7 Service Pack 7 - SmartPlant Instrumentation 07.00.07.05 - SPI V7 Service Pack 6 - SmartPlant Instrumentation 07.00.06.02 - SPI V7 Service Pack 5 - SmartPlant Instrumentation 07.00.05.06 - SPI V7 Service Pack 4 - SmartPlant Instrumentation 07.00.04.02 - SPI V7 Service Pack 3 - SmartPlant Instrumentation 07.00.03.03 - SPI V7 Service Pack 2 - SmartPlant Instrumentation 07.00.02.21 - SPI V7 Service Pack 1 - SmartPlant Instrumentation 07.00.01.09 - - Now – discussion of a bug discovered in version 07.00.03.03	

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6	Analyzer Presentation (continued)	and fixed by version 07.00.06.02. The problem was that users could use the Browser Module to change the Instrument Type from Fieldbus to “something else” and the system would create an orphan tag in the database that could not be modified or deleted within SPI. - - Please stress to your users: - ** The Browser module does not have a means to delete the Component of Interest or the Process Stream(s) Tag - ** The only way to do this is in the Process Data Module (Complex Analyzer Tag Manager) - - If a Stream Tag is deleted (or disassociated from the Analyzer), then the Component of Interest is no longer editable (or able to be deleted). One of the issues that would cause this is related to the issue of Fieldbus Tags, in SPI versions prior to 07.00.06.02. The Fieldbus can not be changed normally back to any other I/O type in the Index or in the Properties. However this could be changed in the Browser Module and create orphan tags. - - The warning message received in the Browser module is misleading. It tells you that the Fieldbus Virtual Tag will be deleted - do you want to proceed. What really happens (in older versions of SPI) is that the Stream Tag would be deleted. - - When this deletes the Stream Tag the datasheet for the Stream Tag is deleted, and the Component of Interest Tag(s) no longer have a tie-down point. These Tags are then unable to be deleted by tools in SPI and they can not be (re) associated with another Stream Tag. They are orphans that you can not manipulate using the pull down menus with in SPI. Our efforts have found that you need to use SQL code to resolve this problem. - - Actually there are 2 solutions using SQL code. - - The first one is the hardest, and requires that the Component of Interest be manually changed to link to a new Stream Tag. - - We opted to delete the orphan entity (Component Tag of Interest) and allow it to be recreated using the SPI Process Data Module Interface. Since Stream Tags are handled by SPI the same way, this workaround can be used to delete Stream Tags also. - - Example: - From a Browser – you CAN NOT delete the AI, but if you change the IO TYPE - - As mentioned before, this is now fixed in SPI 07.00.06.02. because the AI did not disappear. In prior versions of SPI the	

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6	Analyzer Presentation (continued)	AI (or any ANALYZER COMPONENT/PROPERTY) would just disappear and prompt the INtools Administrator to lose lots of sleep. - - For Your information – the following was found to be the problem: - - From Internal Setup: - select CMPNT_ID,CMPNT_NAME, ANALYZER_FLG from COMPONENT where CMPNT_NAME = '101-AI -9000' - - Analyzer Flag definitions: - “” = NULL = not an Analyzer Type Instrument - M = Master Component Tag - S = Stream Component - C = Component of Interest - - You must remove the “C” value from this record to be able to delete it in the Browser Module, and then use the Process Data Module to recreate the proper “replacement tag”. - - Two suggestions to change this value: - 1) Use the Component Table Import in the import module to insert a NULL - 2) Use SQL Code (which includes the commands to disable and enable triggers) - - Please get with Intergraph to get the specific commands for your version of SPI. - - Questions & Answers	
7	Status of SmartPlant Instrumentation	- SPI v.2007 Roadmap update o Alex Koifman, SmartPlant Instrumentation (INtools) product manager o November 13, 2007 - Today’s presentation o SmartPlant Instrumentation v.2007 (v.8) o Upgrade status o 2007.1, 2007.2 and 2007.3 released o 2007.4 in certification o 2007.5 planned o Beyond SPI v.2007 – plans for v.2008 o INtools v.6 and SPI v.7 Status - - v.2007 Release summary - continued o Current upgrades	

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7	Status of SmartPlant Instrumentation (continued)	o Rolled out at RTM at two operating site with As Build working on MSS 2005 on Citrix Metaframe in the US, others internationally o Several EPC's started new projects with 2007 or 2007.1/2 and are upgrading to 2007.3 o Several customer configuring system for integrated project (with SPPID, SPEL and SPF). o Multiple customers go through evaluation and upgrade planning - Beyond 2007 – new release structure o Introducing quarterly 200x.x releases – Service packs but with planned schedules every quarter; mostly fixing bugs (TR's) and streamlining existing functionality; also an opportunity to implement items that are not TR's but have critical customer demand o Released 2007.1 in April , 2007.2 in July, 2007.3 in October, 2007.4 is planned for December 2007, 2007.5 is planned for April 2008 and 2007.5 is planned for July 2007.6 - 2007.1 o Released in April, 2007. o Includes 2 noticeable RI/CR's: o Support AutoCAD 2007 (RI-74061) o Import into multiple engineering projects simultaneously (CR-78164) o Delivered updated Tutorial and Installation and upgrade documentation. o Includes a number of TR's, predominantly v.2007 specific. - 2007.2 o Released in July, 2007. o Several new items: o Resolve some outstanding internationalization and localization issues; o Re-implementation of the user list in the Administration module for connection administration (not for license management); o Maintain default view in Index when working in domain with Multiple plants; o Improve invalid domain deletion mechanism; o Add distinction between Process Control and Safety Process Control controllers o Solution to enhanced security issues on MSS2005 o Make Signal-Strip enhanced wiring report capable of displaying multiple strips on the same sheet o Includes a number of TR's, both internal and customer reported.	

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7	Status of SmartPlant Instrumentation (continued)	- 2007.3 o Released first week of October, 2007. o Several new items: o New interface with Emerson DeltaV; o Support of first phase of Namur NE-100 vendor data exchange mechanism; o Remove the limitation of 200 fields per Browser view; o Decrease the frequency of accessing INTOOLS.INI file improving performance on complex networks o Include substantial number of TR's both internal and reported by customers. - 2007.4 o Planned for December 15, 2007. o Several new items: o Enhancements to the SmartPlant Integration ToDoList – Selection or related tasks and ability to ignore certain tasks from from current and future execution; o Support for Vista business client; o Support for Office 2007 o Additional multi-strip ESL report o Additions to the DDP library for enhanced integration with SP3D - - 2007.5 o Planned for April, 2008. o Several new items: o Fixing remaining Internationalization (I18N) and localization (L10N) issues o Supporting PDF generation without the need for Adobe or Ghostscript (all documents using internal PDF generation library) – tentative only o Create specification browsers across multiple forms o Fixing TR's critical for production - 2007.6 o Planned for July, 2008. o Several new items: o Enhancements to the Calibration module o Supporting PDF generation without the need for Adobe or Ghostscript (all documents using internal PDF generation library) – tentative only o 2 additional items under consideration (important enhancements for all users). o Fixing TR's critical for production	

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7	Status of SmartPlant Instrumentation (continued)	- Plans for 2008 o Release target date – October 2008. o Noticeable items: o Allow adding to the line piping data o Resolve some outstanding internationalization and localization issues o Allow selecting flow conditions (@flow, @standard, @normal) for instrument and DCS ranges o Enable merging entities from the project to As Build in non-exclusive mode o Enhanced integration with SPF (SmartPlant Enterprise) including additional documents to be shared/published to SPF as well as ability to publish much more data from SPI o Improvements to the interface with SPEL o Improve database security and control o Discontinue some obsolete functionality o Improvements supporting off-line engineering project execution when host is As Built domain (not final) - INtools v.6 and SPI v.7 Status o Service packs release o o V.7 SP8 released in March 6 o V.7 SP9 planned for Q1 08 (preliminary) o V.7 SP10 planned for Q1 09 (tentatively) o V.6 SP10 released on March 23. This is a compilation of the hot-fixed TR's and few additional items and is the last planned service pack for v.6	
8	Optimizing SmartPlant Instrumentation Resources	- Optimizing SmartPlant Instrumentation Resources - John Dressel - Optimizing Manpower Utilization o Current Engineering and Design industries are faced with a critical manpower shortage o The manpower shortage has also resulted in a technology gap for experienced Engineers and Designers o SPI offers a way to reduce man-hours but only when it is used in such a way as to optimize manpower o The Question "How much time can will SPI save me?" must be answered "None!" o The Work Processes determine if SPI and other software are being Optimized for Manpower Utilization - -	

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		- Optimization Opportunities o Incorporate new techniques in your Work Practices for better Manpower Utilization o ***Automation*** saves time by reducing the number of hours it takes to perform a task o ***Work Sharing*** saves money by reducing the total cost per hour to perform a task o ***Specialization*** saves time by optimizing the use of skilled specialists to perform complex tasks o ***Simplification*** saves time by using “out of the box” reports and SPI project deliverables o ***Integration*** saves time by sharing data and allowing data to move electronically between applications - Automation Opportunities o SPI can facilitate Automated tasks for both Engineering Construction and Owner Operator companies o SPI can be used as a simple data repository and loop generator or it can be used as an "Automation Tool” o Automation reduces the amount of manual manipulation required to perform given SPI tasks o The degree of Automation in SPI is defined by the Following: o Work Processes that include Automation o Users trained to use SPI Automation functions o Project requirements and schedule - - Primary Automation Function o Instrument Type Profile Table o Wiring Presets include Control System Tag Auto-create o Panel Name o Cable Name o Connection Type o Specsheet Name o Default Data o Multi-Item Form o Dimensional Data Group o Primary Hookup o I/O Type o Location o Loop Creation and Process Data Workflow - - Index Automation Functions o New Tag Instrument Type Profile Data expansion o Duplicating data from Tag to Tag or Loop to Loop o Batch creation of Loops from Loop Patterns	

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		o Browse Automation - - Spec Sheet Automation Functions o Associate an External Title Box to Spec Sheets o New Tag Spec Sheet Profile Data expansion o Create and Copy from Template data o Batch Report Generation o Batch save as Excel o Global Revisions - - Process Automation Functions o New Tag Profile Process Data expansion o Propagation of data from Lines or other Tags o Unit Conversion o Global Revisions o Data Exchange o Spec Sheets o Calculations o External Editor o Legacy Systems o Simulators o Base Conditions - - Calculation Automation Functions o Automatic results population of Spec Sheets o Batch Calculations for CV, PSV, FE and TW o Unit Conversion o Global Revisions o Data Exchange o Spec Sheets o Process - - Wiring Automation Functions o Use Default Panels and Cables o Duplicate Panels and Cables o Auto-Wiring Routing Utility o Junction Box Pre-assignment o Automatic Cross Wiring o Cable Router and Spooler o Automatic Cable Schedule o Global Revisions - - Document Automation Functions o Automatic Report forms for all browse Views o Global Revisions for Deliverable Documents	

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		o Batch Printing of most common reports o Enhanced Reports for Loops and Wiring Drawings o All Reports Export ODBC or DXF o Automatic Drawing Generation in: o Enhanced SmartLoop o AutoCAD o Microstation - Sequence of Automation o Educate users for the Automation Function you wish to use o Prepare the rule base or trigger data before launching the Automation Function o Test the Automation Function to see if you are getting expected results o Launch the Automation Function on the complete task o Check the results of the Automation Function carefully - Do Not Misuse Automation o Match the tool to the task. Select the Automation Function carefully. o Clean bad data from the rule base or bad trigger data from the database. o Validate data before and after running an Automated Function. o Don't try and do too much with one Automated Function. o Know the limits of automation and do not try to do complex tasks with Automated Functions - Work Sharing Opportunities o Work Sharing High Value Resources o Work Sharing Around the Clock o Work Sharing with Experts o Work Sharing Resources - Specialization Opportunities o Using Specialized Users can improve SPI data quality and increase productivity o Creating Specialists - Train selected users in specialized tasks to allow them to be knowledge resources o Existing Specialists - Collaborate with existing experts using net meetings and forums better utilize their abilities o Outside Specialists - Use outside experts from vendors or service companies to fill gaps in resources - - Simplification Opportunities o Simplify Data Reduction	

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		o Simplify Deliverables o Simplify Work Processes o Simplify SPI Staffing - Integration Opportunities o SmartPlant Foundation – Integration with SPF can optimize the utilization of SPI data across other Intergraph products o Vendor Applications – Integration to vendor control valve sizing and DCS configuration software will maximize the SPI data o External Editor – Using the SPI External Editor can allow mechanical vendors load some of your Spec data for you o PDS 3D model database – The SPI DDP module will integrate the SPI inline sizing data with the 3D model o SmartPlant P&ID and Electrical – The built-in SP P&ID and SPEL interfaces allow data transfer if your work processes are designed to utilize the shared data o Import Export – The ability to import and export data to and from other applications will extend your Integration capabilities -	
9	CR Ranking	SmartPlant Instrumentation CR Ranking (See attached Spreadsheet)	
10	Forum Topics	- Recent issues with SmartPlant Instrumentation o MS Virtual Server vs. VM Virtual Machines o Process Module multi-cases and FirstVue Interface o Delta V interface will only work on Oracle or MS-SQL - SmartPlant Instrumentation Workarounds	
11	Close	- Review of meeting - Review of action items - Next meeting to be February 6, 2008 - John Dressel closed meeting	