SMARTPLANT INSTRUMENTATION V2009, SP3
BATCH LOOP AND TAG CREATION

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Introduction

- The purpose of this presentation is to show the SPI users how to utilize and use the new SPI batch loop and tag creation function. This new function was introduced to SPI in V2009, SP3.

- The new SPI batch loop and creation function is implemented to support the SPP&ID macro expansion function and the interface between SPI and SPP&ID.

- The new SPI batch loop and creation function enables the SPI user to batch create tags without having to batch create loops. In the old SPI and INtools versions, the SPI user could not batch create tags without creating loops.

- The new SPI batch loop and creation function utilizes the SPI reference explorer to create the necessary typical (templates) for loops and tags.

- The new SPI batch loop and creation function utilizes the SPI reference explorer to create the macro expansion function.

- Either the loop and/or tag property windows or the index browser or the macro item general property can be utilized to populate data to these typical loops and tags.
The reference explorer is used to create the typical loops and tags.

- Highlight Typical loops folder – right click – New – Loop

- Define the typical loop name and define loop property info (if required) such as service, type, function, notes, and criticality.

- Define the instruments that will be assigned to the typical loop. This includes defining the instrument data (if required) such as service, instrument type, status, location, manufacturer, model, I.S., power supply, notes, signal type, linearity type, and UDT’s.

- The typical instruments can be Conventional, or Fieldbus, or Electrical, or Hart, or Profibus, or Soft Tag, or Telecom.
Local typical instruments can be defined as well without having to define a typical loop.

Highlight the typical instrument folder – right click – New – Instrument.
Typical Instruments and Browser Module

- The browser module can be utilized to update typical instrument information such as UDF’s, instrument price, instrument serial number, remarks, etc.
  - The key to view typical instrument in a browser view is to set the browser data level to Typical.
  - There are some SPI tag information that can not be utilized through the browser such as line numbers, P&ID, and Equipment.
The reference explorer macros folder is used to define macro expansion for creating typical loops and instruments either by the SPI user or the SPI interface with SPP&ID.

- Highlight the macros folder – right click – New
- Define the Macro name, and description.
- The 2 carrier check boxes are used when interfacing between SPI and SPP&ID and executing the To DO List tasks.
Assigning a Typical Loop to the Macro

- Highlight the typical loop and drag and drop in the macro item details area.
  - The External usage check box is used to use this typical loop with other external applications.
Creating Project Loops using the Assigned Macro

- The created macro is now part of the macro folder in the reference explorer.
  - Highlight the macro name – right click – action – batch macro creation.
  - In the batch macro creation window, define the number range for these loops and tags.
  - Examples: 9000-9010, 9012-9014, 9016, 9018. The dash (-) means create the numbers in sequence, and the comma (,) means create the numbers as specified.
Creating Project Loops using the Assigned Macro

- The Properties command allows the SPI user to define addition loop and tag data such as Suffix, loop and tag index data.

- The macro property can be exported and imported as XML files.
  - Please note that the XML file truncates data that is longer than 200.

- The Run command will execute the creation of the project loops and tags.
Created project Loops and Tags

- Flow Loops and Tags and Index Data.
- Local Pressure Gage Instruments with no loop association.
Typical Browser Data vs. Macro Item Gen.

- In the typical browser data, Remarks 1 = LTUF.

- In the macro item general property data, Remarks 1 = LTUF-HOUSTON
Typical Browser Data vs. Macro Item Gen. Property

- Created the project tags and Remarks 1 for these tags = LTUF-HOUSTON

- Therefore, any typical data that is defined in the macro item general property window will overwrite “supersedes” typical data defined in the browser and/or the loop or tag property window.
Typical Loop and Tag Issues

- Multiple places (property windows, browsers, and macro item general properties) to populate typical loop and tag information such as Status, remarks, etc.

- Cannot define fieldbus, Hart, and Profibus information such as Function Blocks, Device Revision, Analog Signal Parameters, Voltage, etc to a typical fieldbus, Hart, and Profibus tag.

- There are other issues that are reports by the users and fixed in SP3 and Hot Fixes and SP4 and Hot Fixes. Please refer to the Intergraph Knowledgebase Website.