Using OPC90 with ExperTune PlantTriage and PID Loop Optimizer

The OPC client capability of ExperTune's PlantTriage software makes it easy to gather real-time performance data. This document summarizes the procedures to configure PlantTriage to gather data via OPC90. For more details, refer to the PlantTriage engineering interface help file.

To use the PlantTriage Bailey Infi90-N90 via Rovisys OPC wizard the Rovisys OPC90 Server must be configured with a database and communicating with the Bailey system. Run the Rovisys OPC90 Server and define a device and STN blocks associated with the loop tags that are to be tuned. Select View|Monitor to instruct it to begin communicating with the Bailey system. If you have programmed your control system with intermediate logic that switches the STN block between two or more PID blocks you must define the PID block to the Rovisys OPC Server. For this situation while in OPC90 Server monitor mode you must perform the following actions:

- 1) Start the Rovisys OPC Server.
- 2) Command it to monitor mode (select View|Monitor).
- 3) Looking at the Rovisys OPC Server window.
- 4) Move down the tree to the loop.
- 5) Right-click the PID_BLOCK parameter.
- 6) Select Write.
- 7) Enter the block number of the PID block.
- 8) Click Write.
- 9) Close the Write to tag window.
- 10) Save the configuration with menu item File|Save.
- 11) Run the PlantTriage OPC wizard.

<u>PID Loop Optimizer – Use the Wizard</u>

Use the "Bailey Infi90-N90 via Rovisys" wizard to set up the loop. Select the wizard after New Loop or after Setup Wizards in the Edit Setup window.

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Then, simply follow the wizard steps:

Bailey Infi90-N90 via Rovisys Setup				
	LoopTag			
	LoopTag: 44FIC313			
Enter the l	_oopTag for this loop.			
No changes will be implemented until you get to the end of the wizard and click Finish. Click Cancel at any time to leave without making changes.				
<u>H</u> elp	<pre>< Back Next > Cancel v10.12.11-x</pre>			

PlantTriage Loop Configuration

To configure many loops for communications with OPC90 in PlantTriage, use the following procedure:

- 1. Build a single loop in PID Loop Optimizer, using the Rovisys wizard, as described above.
- 2. From the PlantTriage Engineering Interface, start the new loop wizard. When you are asked whether the loop has been analyzed, click "Yes..."

🐃 ExperTune PlantTriage - Creating loop: 🔀				
Analyzed? Yes, loop has been analyzed and tuned by ExperTune Tuner/Analyzer No, loop not analyzed and tuned				
Have you already used ExperTune Tuner/Analyzer on the loop? If Yes, ExperTune PlantTriage will read details from the loop's .tun file. If No, ExperTune PlantTriage will ask for details of your controller. Help < Back				

- 3. Save the loop configuration.
- 4. Use the "PlantTriage Export" program, XPExport.exe, to create a .csv file containing the loops already configured in your system.
- 5. Use the .csv file as a template to add your additional loops. Then run the "ExperTune Database Import" utility to configure the loops in PlantTriage.

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What do you want to set up?	
Tuner/Analyzer .TUN files	
PlantTriage database	
C Equation builder	
Use this program to import loop data into ExperTune. It works on its own or together with an ExperTune wizard. You must supply a .CSV file. Each row in the .CSV file represents a loop. Each column in the .CSV file represents a loop parameter. The parameters to be specified depend on the wizard.	
 (1) Run this program once to create a specimen .CSV file. (2) Create your .CSV file in the correct format. (3) Run this program a second time to convert the .CSV file into ExperTune Tuner/Analyzer .TUN files or a PlantTriage database. 	
Start by defining if you want to set up .TUN files or a PlantTriage database.	
Help < Back Next > Close	
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Rovisys Settings

With Rovisys OPC Server version 2.4 or later, there is "fast update" mechanism for ensuring that the PID values are polled at a fast rate. This fast polling interval can be set within the OPC server. PlantTriage automatically puts the OPC Server into "fast update" mode by writing non-zero, every 30 seconds, to a special parameter: LoopTag.KFAST, where LoopTag is the tag name of the loop. When the Faceplate closes, the special parameter is set back to zero.

This action of putting the Rovisys OPC Server into fast update mode takes place automatically. With earlier versions of the Rovisys OPC Server no fast polling is possible and there are no error messages.

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