## Using OPC90 with Rockwell RSView32

The OPC client capabilities of the Rockwell Software RSView32 MMI, make it easily configured to exchange data with OPC90 Server. This document provides a general overview on how to setup RSView32 to exchange data with OPC90. Consult the RSView32 documentation for specific details on its use.

Before beginning, make sure both RSView32 and OPC90 Server have been correctly installed. If they are installed on separate PCs, make sure DCOM is correctly configured. See the section entitled "Using DCOM" for instructions on how to configure DCOM. Before configuring RSView32, the OPC90 Server database must also be configured.

The first step is to define a node and its type that RSView32 will be exchanging data with. Under the project "Edit Mode" tab open the system folder and double click on "Node". Click on OPC Server as the data source and the following dialog will appear:

🔄 RSView32 Works	
File Edit View Window Help	
SAMPLE.RSV - Project	
Edit Mode Run Mode	
System	
Node 😌	
Data Source: O Direct Driver O DDE Server	Close
Name: OPC90 I Enabled	Accept
Name: RoviSys.0PC90Server	Discard
Type: O In-Process O Local O Remote	
Server Computer Name or Address:	
Access Path:	
L Update Rate: 1.000 seconds	
	ear Clear <u>A</u> ll
For Help, press F1	NUM //

Type in "OPC90" for the name (or any other alternative name) and "RoviSys.OPC90Server" for the server. Click on "local" if OPC90 and RSView32

are install on the same PC otherwise click on "remote". The default update rate of 1 second matches the default rate at which OPC90 requests exception report data from the Bailey system. If data updates need to be faster or slower, adjust both this value and the OPC90 exception report update rate (see DEVICE block). Click accept to save this node setup.

Once the node is defined, tags can be added. In the project "Edit Mode" tab under the system folder, double click on "Tag Database". To associate the tag with OPC90 the data source should be set to "Device" and the node name to OPC90 (or the alternative name given in the preceding step). Since OPC90 Server supports database browsing, the data source address can be determined

by browsing to the appropriate OPC90 database point by clicking on the button or see the section entitled "Blocks" for details on OPC90 Server naming conventions. Give the tag a name, assign its type and description. Leave the tag data type as "(Default)". This will cause OPC90 Server and RSView32 to agree upon the type in real time when the tag connection is made.

by RSView32 Works	
File Edit View Window Help	
Edit Mode	-
Image: System       ▲         Image: System       ■         Image: System       ■ <td< td=""><td></td></td<>	
📲 Tag Database	
Name: AnalogInput Type: Analog Security: *  Close	
Description: Sample analog input from OPC90 Server  Erev	
Minimum: 0 Scale: 1 Units: Deg C Ne <u>x</u> t	
Maximum: 59 Offset: 0 Data Type: Floating Point 💌 New	
Data Source       Type: ⊙ Device       O Memory	j
For Help, press F1	

Click on the Accept button to save the new tag in the RSView32 database. Use the tag monitor to verify data can be received from OPC90 for the tag just added. In the project "Edit Mode" tab under the system folder, double click on "Tag Monitor". Type in "AnalogInput" under the tag name column and RSView32 will make an OPC connection with OPC90 and begin receiving the tag data as shown by the following dialog:

🖞 RSView32 Works 📃 🗆 🗴
File Edit View Window Help
Edit Mode
Image: System       Image: System         Image: Provide the system       Image: System
Untitled - Tag Monitor
?     Tag Name     Value     State     Description
1 Y AnalogInput 54 valid Sample analog input from OPC90 Server 💌 💌
Clear         Clear All           For Help, press F1         NUM

This RSView32 tag is now available to be linked to a graphic. Under the project "Edit Mode" tab open the graphics folder and double click on "Display". A new display will appear as shown by the following example:



Click on the numeric display button available in the toolbar. Outline an area in the display graphic where the tag value should be placed. The following dialog will appear:

Numeric Display	×
Expression	
Ir Logical Helational Arithmetic Bitwise Functions Tags	
Field Length: 6 Format: Decimal 🔽 Leading Character Justification	1
Decimal Places: 0 Overflow: Show exponent 💌 👁 Blanks O Zeroes 🛛 O Left O Center O Right	
OK Cancel Help	

Click on the Tags button and select the AnalogInput tag as shown by the following dialog appearing:

Tags		×
Folders:	Tags:	
<b>*</b>	AnalogInput	OK
		Cancel
		Help
		Edit Tag
		New Teg
		New rag
		New Folder
• •		Other DB

Click Ok to save the tag selection. Save the display as Sample. Under the project "Run Mode" tab open the graphics folder and double click on "Display" and than "Sample". Something like the following run time graphic will appear:

SA	ew32 Works MPLE.RSV - Pro	oject <u>R</u> un Mode				
	System Graphics Misplay Alarms Data Log	▲ ▼ Ru	Sample Sample - Dis 29	splay		
				<u>C</u> lea	IT Clear <u>/</u> NUM	

The basic steps for creating a node associated with OPC90 access, a tag and linking the tag to a process graphic is complete.

## **Bonus Material**

The OPC90 Server installation CD contains an RSView32 project that supports configuration capabilities of ABB Bailey controller logic. Look under the "Sample\RSView32" directory to find this project. To utilize it, the OPC90 database must have a device named CIU and a BLK block named "AnyBlock". The project defines the necessary RSView32 database tags and single graphic that mimics the functionality of the BLK block faceplate.