Data Connect



Using XLReporter with RSLinx[®] Classic

Overview

XLReporter takes process values directly from a PLC to a report without requiring a historian or database. This is accomplished by "report-as-you-run" technology that automatically populates a workbook, periodically or on event, without needing Excel. Completed reports are produced in workbook, PDF and web formats.

Data retrieval from a PLC uses an OPC Server such as RSLinx. The versions of RSLinx supported include:

- RSLinx Classic Single Node
- RSLinx Classic OEM
- RSLinx Classic Professional
- RSLinx Classic Gateway

Setup RSLinx

Define a DDE/OPC Topic

Open the **RSLinx Classic** control panel from the **Rockwell Software** program group and select **DDE/OPC, Topic Configuration**.

DDE/OPC Topic	Configuration	?	×
Project	Default		
Topic List:		Data Source Data Collection Advanced Communication	
<mark>SyTech</mark> SyTech2		✓ Autobrowse Petresh ➡ Linx Gateways, Ethernet ➡ Linx Gateways, Ethernet ➡ J192.168.8.240, 1769-L16ER-BB18 LOGIX5316ER, 1769-L ➡ J192.168.8.240, 1769-L16ER-BB18 LOGIX5316ER, 1769-L ➡ J192.168.8.243, 1769-L16ER-BB18 LOGIX5316ER, 1769-L ➡ J192.168.8.243, FactoryTalk Linx - Desktop, RS-11 ➡ J192.168.8.243, FactoryTalk Linx - Desktop, RA-1 ➡ J192.168.8.7, FactoryTalk Linx - Desktop, RA-1	16ER/E 16ER/E
New	Clone	Delete Apply Done Help	

- Select New
- Enter a *name* for the topic
- *Browse* to the target device for the topic.
- Click Apply.

On the Data Collection tab

• Specify the Processor Type

On the Advanced Communication tab select the settings.

DDE/OPC Topic Configuration	? ×
Project: Default	
Topic List	Data Source Data Collection Advanced Communication
SyTech SyTech2	Changing information on this tab may cause the information to no longer be connected to the correct object on the Data Source tab.
	Communications Driver: A8_ETHIP-1 A-8 Ethemet RUNNING Processor Configuration
	C Local or Remote Addressing C Local C Remote Addressing C Local C Remote Configure IAB ETHIP-1\0.[192158.8.240]
	Number of errors before returning error to client:
New Clone	Delete Apply Done Help

Prerequisites

Verify RSLinx License

Open the **RSLinx Classic** control panel from the **Rockwell Software** program group. In the title bar verify that the installed version is **NOT** Lite or Enterprise.

🇞 RSLinx Class	ic Lite - [RSWho - 1]						
🕂 File View	Communications	Station	DDE/OPC	Security			
* \$							
Autobrowse	Refresh 🚺	₽ <u>₽</u>	Not Browsing				
□-夏 Workstation, RA-1 善器 Linx Gateways, Ethernet							

Verify Communication

Communication between RSLinx and the PLC can be verified using the OPC Test Client provided by Rockwell Software.

From the **Rockwell Software** program group, **RSLinx, Tools** and select the **OPC Test Client**. This client will validate the communication and also verify that RSLinx is capable of exchanging data with XLReporter.

Select Server, Connect to open the Select an OPC Server window.

• Choose *RSLinx OPC Server* and click **OK**.

🛃: RSI - OI	PC Test Client - [~RSLinx Ol	PC Server]		-	- 🗆 X
😿 File S	Server Group Item Log	View Window Help			_ 8 ×
	Connect Disconnect Status Get Group by Name Get Error String Group Enum MMI Emulation Mode.	Select an OPC Server OPC Server Prog ID: [FSLinx OPC Server Located Servers: Factoro Talk Gateway RSLinx Remote OPC Server RSLinx Remote OPC Server RSDPC Gateway Node Name (Optional):	K DK Cancel Browse	Sub Updates	Update Rate
	<				>

Select Group, Add Group.

• Enter a Group Name and click OK.

RSI - OPC Test Client - [~RSLinx OPC Server]	. 🗆 X
🗹 File Server Group Item Log View Window Help	- 8 ×
Image: Section of the section of th	Update Rate
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Select Item, Add Item to open the Add New OPC Item window.

• Select a tag by navigating in the lower left list, selecting a tag on the lower right list and clicking Add.

Test Connect (Actual Ra	R	emove Iten	n(s)	[)el	Sub Quality	Sub	Updates	U	pdate Rate	Run. Av	g		
	A	ctive State	- 11 - C-X	Add New OP	C Item	1)	×
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	S	nc Read						1	Active:	v		4	kdd Item	
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				You can add before addin	items g them	using this dialog . Results will be d	Click on v splayed fr	alidate iten om this act	ns if you tion.	i wish to chec	< your items ag	gainst I	he server	_

• Click **OK** to return to the **OPC Test Client** window.

All of the selected tags appear along with their real-time values, type, quality, and timestamp.

If the client does not respond as described contact Rockwell Automation technical support to troubleshoot and correct these issues.

Create a Project

From the **XLReporter Project Explorer** select **File, New** to start the **Project Wizard**. This will give step-by-step instructions on creating a project

Step 1

• Enter a **Project Name** and **Description** (optional).

Project Name:	XLR_Project
	Project Off Line
Description:	Customer or Site name
Project Location:	c:\XLRprojects

Step 2

• Configure the data connector, click Add

Ne	w Project		
s	tep 2 : Configure the Connector	s (data sources) of the Project.	
4	🖬 Add 🥒 Modify 🗼 Delet	te 🌼 Catalog	
	Name	Provider	Description
*			

Select Rockwell Automation, RSLinx Classic

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Test Connection
~
Test Connection
Settings

The connector requires a **Primary Server** which, by default has **Node** set to *local*.

Remote Communication to RSLinx

If RSLinx is installed on a workstation remote from the PLC then set the **Node** to an item in the dropdown list or enter an *IP address*.

The workstation must also have the OPC core components installed. To determine if the core components are installed verify the following file exists:

- 64 bit OS C:\Windows\SysWow64\OPCEnum.exe
- 32 bit OS C:\Windows\system32\OPCEnum.exe

If the components are not installed then they are provided in the tools folder of the installation or from www.opcfoundation.org.

Verify Data Communication

To verify communication to RSLinx, open the **Project Explorer** and select the **Tools** tab. Launch the **System Check** application.

- Click Add
- Choose the RSLinx Connector from the dropdown list,
- Click the pushbutton ([...]) next to Items to open the Tag Browser window.
- Select one or more tags, click OK



• Click **Start** to verify the communication

System Check			x
File Edit	Tools		
Connector Gen	eral		
Add 🖉 N	Aodify 🔀 Delete 🛛 🔛 Clear 🏼	Start	
Connector	Source	Description	Value ^
RSLinx_DA	[SyTech]Local:1:C.COSOffOnEn	[SyTech]Local:1:C.COSOffOnEn	0
RSLinx_DA	[SyTech]Local:1:C.COSOnOffEn	[SyTech]Local:1:C.COSOnOffEn	0
RSLinx_DA	[SyTech]Local:1:C.FaultMode	[SyTech]Local:1:C.FaultMode	0
RSLinx_DA	[SyTech]Local:1:C.FaultValue	[SyTech]Local:1:C.FaultValue	0
RSLinx_DA	[SyTech]Local:1:C.ProgMode	[SyTech]Local:1:C.ProgMode	0
RSLinx_DA	[SyTech]Local:1:C.ProgValue	[SyTech]Local:1:C.ProgValue	0
RSLinx_DA	[SyTech]Local:1:C.Pt00FilterOffOn	[SyTech]Local:1:C.Pt00FilterOff	1000
RSLinx_DA	[SyTech]Local:1:C.Pt00FilterOnOff	[SyTech]Local:1:C.Pt00FilterOn	1000
RSLinx_DA	[SyTech]Local:1:C.Pt01FilterOffOn	[SyTech]Local:1:C.Pt01FilterOff	1000
RSLinx_DA	[SyTech]Local:1:C.Pt01FilterOnOff	[SyTech]Local:1:C.Pt01FilterOn	1000
RSLinx_DA	[SyTech]Local:1:C.Pt02FilterOffOn	[SyTech]Local:1:C.Pt02FilterOff	1000
RSLinx_DA	[SyTech]Local:1:C.Pt02FilterOnOff	[SyTech]Local:1:C.Pt02FilterOn	1000
RSLinx_DA	[SyTech]Local:1:C.Pt03FilterOffOn	[SyTech]Local:1:C.Pt03FilterOff	1000 🗸
<			>
Clear			
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Scheduling

Windows Service

If XLReporter's Scheduler is set to *Run as a Service*, RSLinx must also be configured to start as a service.

RSLinx Classic Launch	- 🗆	×
Tools		
RSLinx Classic Service is	running.	
Cheve	0	
start	Stop	
Start ✓ Always Run As Servio	с	

From the RSLinx program group, open the RSLinx Launch Control Panel. Verify **Always Run As Service** option is checked. If it is not, click **Stop**, enable the option and click **Start**.

Event Triggers

If the Scheduler is configured perform actions on events that involve multiple PLCs it is recommended that a unique Data Connector is defined for each PLC.

When a PLC goes offline, the Scheduler will require a restart. A restart of the Scheduler can be automated by configuring a *Run an Application* action with the **Application** set as *bin\xlrScheduleReset.exe*. This should be triggered periodically at a time when the events are typically not active.