# DOCUMETATION FOR: ABCIP CONFIGURATION

Prepared by

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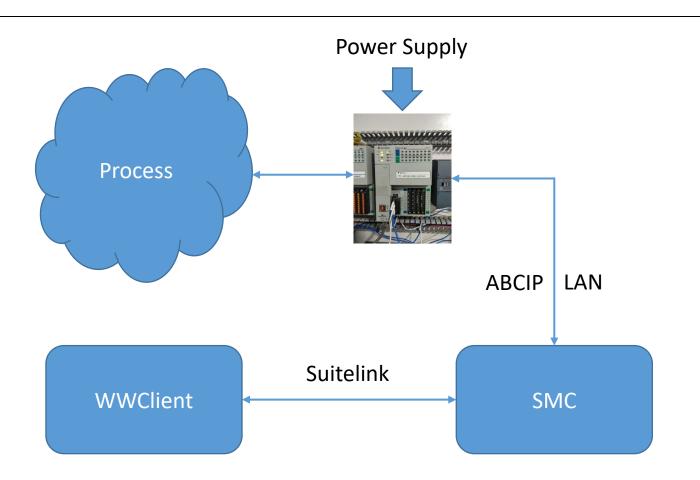


## OI ABCIP CompactLogix Configuration

### Allen-Bradley Compact logix Hardware Setup







The Wonderware ABCIP OI (Operations Integration) Server is a Microsoft Windows application that allows client applications direct and indirect access to Allen-Bradley families of ControlLogix, GuardLogix, FlexLogix, CompactLogix, SoftLogix 5800, MicroLogix, PLC-5, and SLC500 controllers.

The OI Server does not require any Rockwell Software RSLinx<sup>™</sup> package

The ABCIP OI Server communicates with supported devices either directly or indirectly across the following device networks:

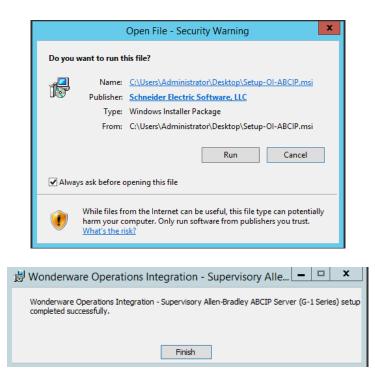
- ControlNet
- Data Highway 485 (DH485)
- Data Highway Plus (DH+)
- DeviceNet
- Ethernet

The ABCIP OI Server will provide direct and indirect connectivity to the following Allen-Bradley controllers:

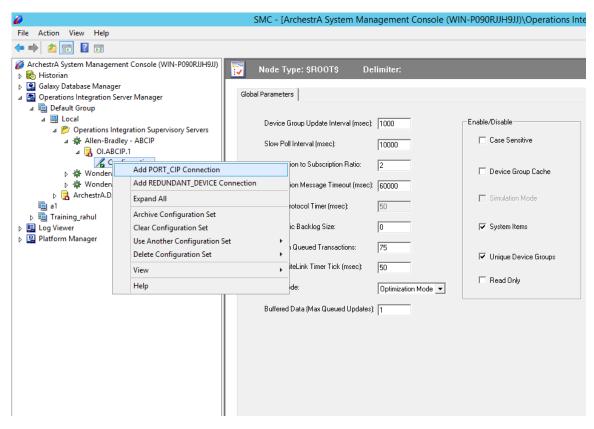
- ControlLogix Controllers
- GuardLogix Controllers
- SoftLogix 5800 Controllers
- CompactLogix Controllers
- FlexLogix Controllers
- MicroLogix Controllers
- PLC-5 Controllers
- SLC500 Controllers



1. Install ABCIP OI After installation it will show in the SMC.



2. Navigate to the Operations Integration Supervisory Sensors – Allen- Bradley ABCIP and right click on the configuration and add PORT\_CIP Connection.





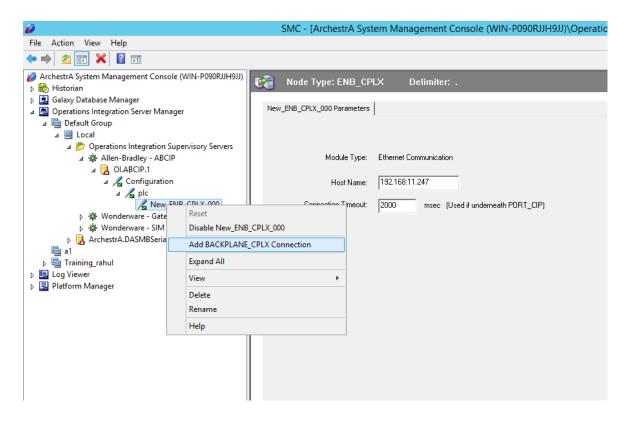
3. Add ENB\_CPLX Connection (For CompactLogix)

4. Enter IP Address of PLC and Save it.

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<ul> <li>ArchestrA System Management Console (WIN-P090RJJH9JJ)</li> <li>Historian</li> <li>Galaxy Database Manager</li> <li>Operations Integration Server Manager</li> <li>Default Group</li> <li>Local</li> <li>Configuration</li> <li>A Configuration</li> <li>A Configuration</li> <li>A plc</li> <li>Nonderware - Gateway</li> <li>ArchestrA.DASMBSerial.2</li> <li>al</li> </ul>	Node Type: ENB_CPLX         Delimiter:           New_ENB_CPLX_000 Parameters
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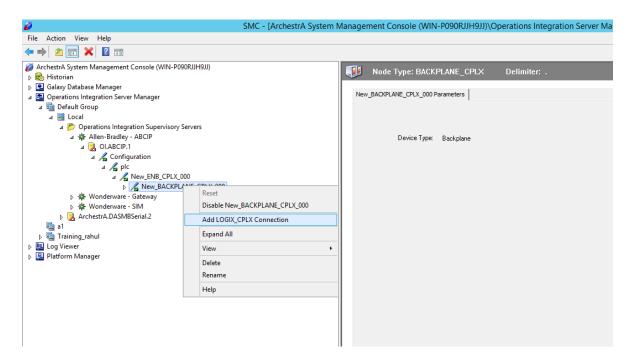
5. Add BACKPLANE\_CPLX connection.



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ArchestrA System Management Console (WIN-P090RJJH9JJ) Historian Galaxy Database Manager Deparations Integration Server Manager Default Group Local Deparations Integration Supervisory Servers A Ren-Bradley - ABCIP	Node Type: BACKPLANE_CPLX     Delimiter:       New_BACKPLANE_CPLX_000 Parameters       Device Type:       Backplane
	Device type. Backplane
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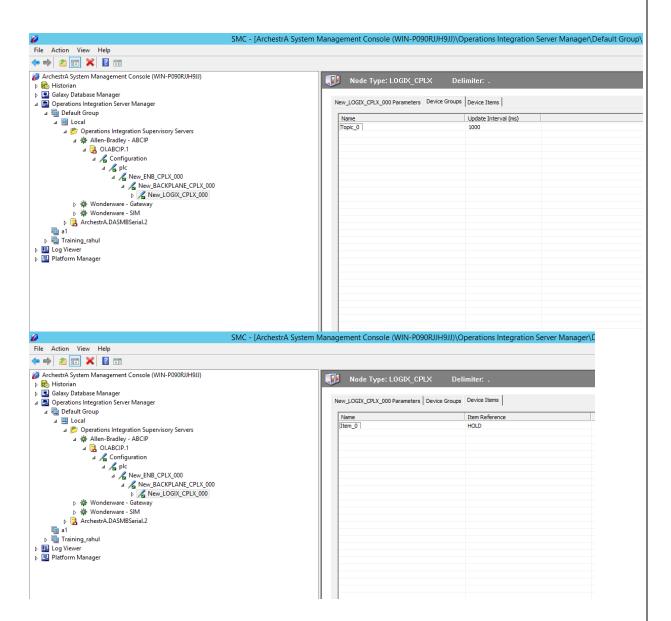
6. Add Logix\_CPLX Connection.



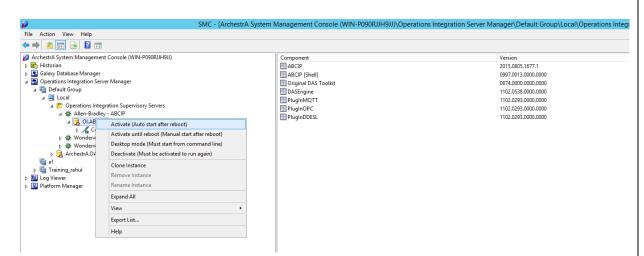
7. Add Device Group and device items

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	Node Type: LOGX_CPLX       Delimiter:         New_LOGDX_CPLX_000 Parameters       Device Groups         Processor Type:       CompactLogix         Slot Number:       0         Reply Timeout:       15         Max CIP Connections:       4         Optimization:       Optimize for Read         Image: Optimize User Defined Data Types         Tag Database         Image: Auto Load Tags         Image: Use Persisted Tags





8. Activate OI ABCIP Server





9. Open WW Client.

File Script Connections Item Help

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10. Go to connection and create connection.( Topic\_0 for example)

	Create Connection
Node:	localhost 💌
Application:	ABCIP
Topic:	Topic_0
Connection 1	Type DE
	Create Done

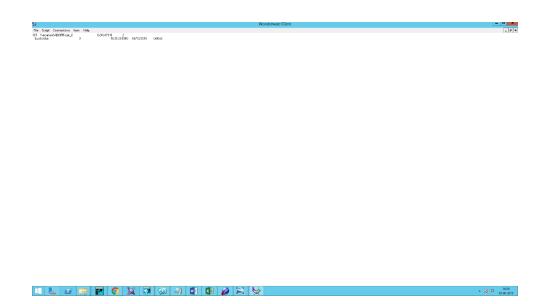
11. Go to item and add item.

Item	
Connections \\localhost\ABCIPITopic_0 0x01b17118	Register
	Advise
	Unadvise
	Request
	Unregister
Item	Poke
\$sys\$status	AdviseEx
Value	UnadviseEx
	Done



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▲ 16:15 13-06-2019 12. Now tags will show in the wonderware client.



13. You can also view that data in SMC in Diagnostics.

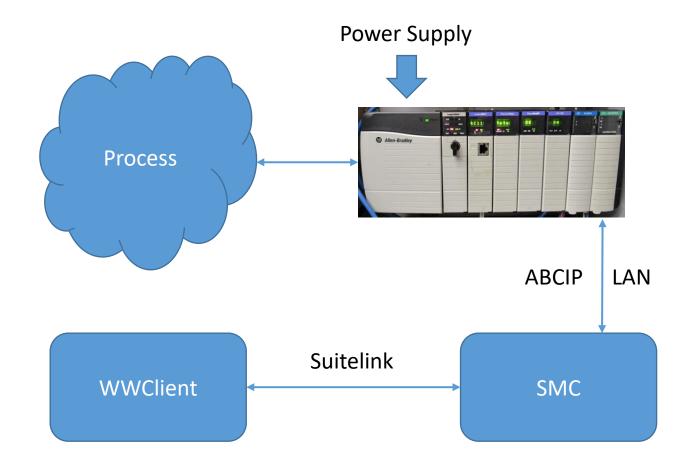
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b III Client Groups						
Structure						
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## OI ABCIP ControlLogix Configuration

Control

Allen-Bradley Control logix Hardware Setup

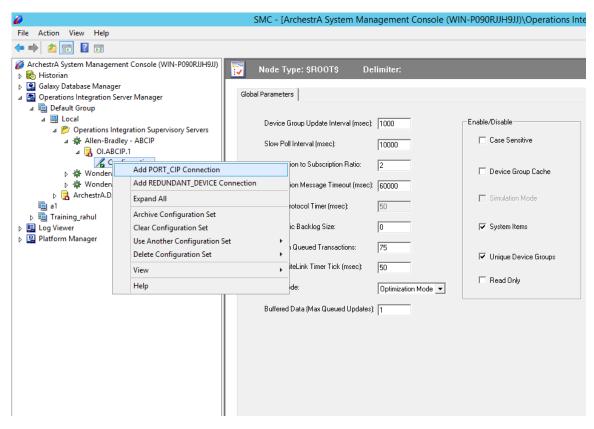




1. Install ABCIP OI After installation it will show in the SMC.

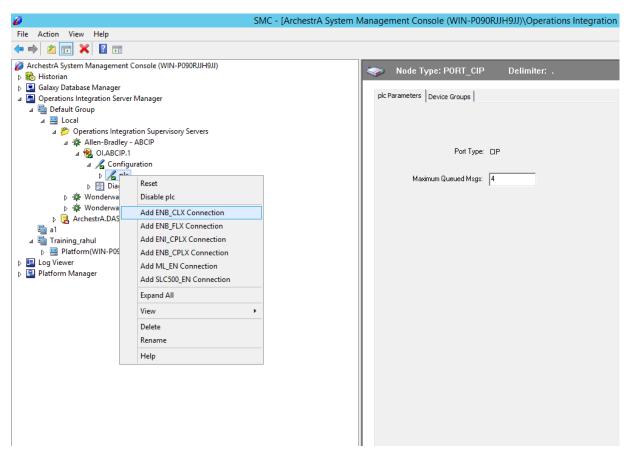


2. Navigate to the Operations Integration Supervisory Sensors – Allen- Bradley ABCIP and right click on the configuration and add PORT\_CIP Connection





3. Click on PLC and add ENB\_CLX Connection

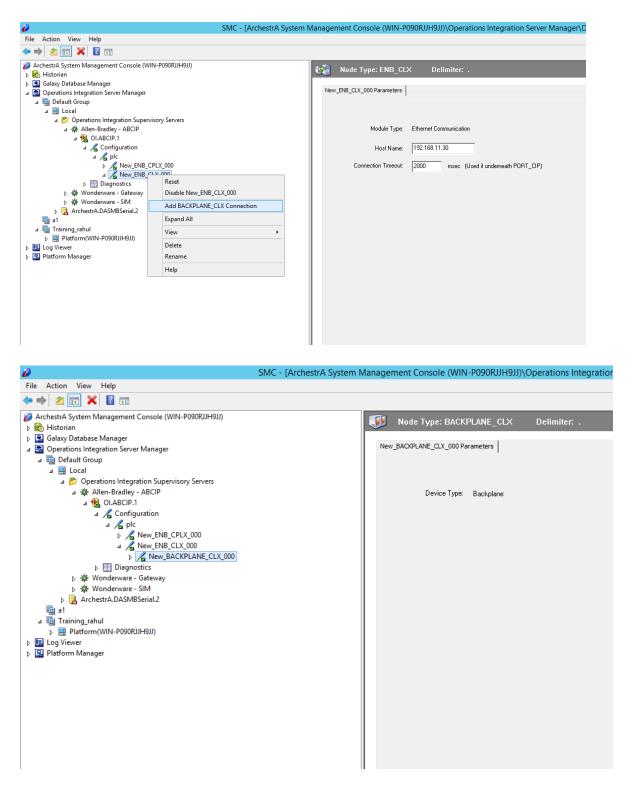


4. Enter IP Address of PLC

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Galaxy Database Manager	New_ENB_CLX_000	Daramatere
Operations Integration Server Manager	New_END_CLX_0001	a aneters
⊿ Image Default Group ⊿ Image Local		
Local Derations Integration Supervisory Servers		
A llen-Bradley - ABCIP	м	odule Type: Ethernet Communication
⊿ 🙀 OI.ABCIP.1		
⊿ 🔏 Configuration		Host Name: 192.168.11.30
⊿ 🔏 plc		
New_ENB_CPLX_000	Connect	ion Timeout: 2000 msec (Used if underneath PORT_CIP)
New_ENB_CLX_000		
Diagnostics		
Wonderware - Gateway		
▶ Wonderware - SIM		
ArchestrA.DASMBSerial.2		
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Platform(WIN-P090RJJH9JJ)		
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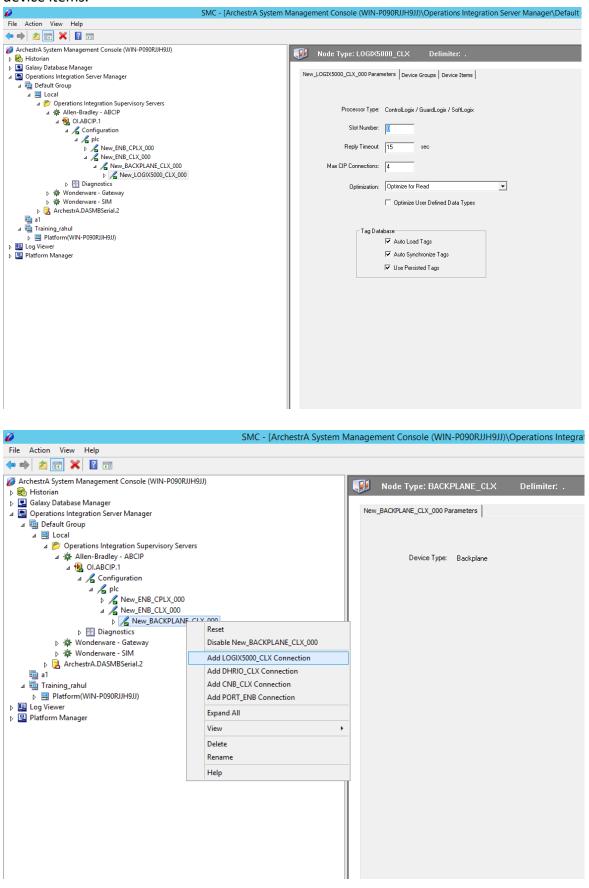


5. Right click on ENB\_CLX\_000 and Add Backplane\_CLX Connection

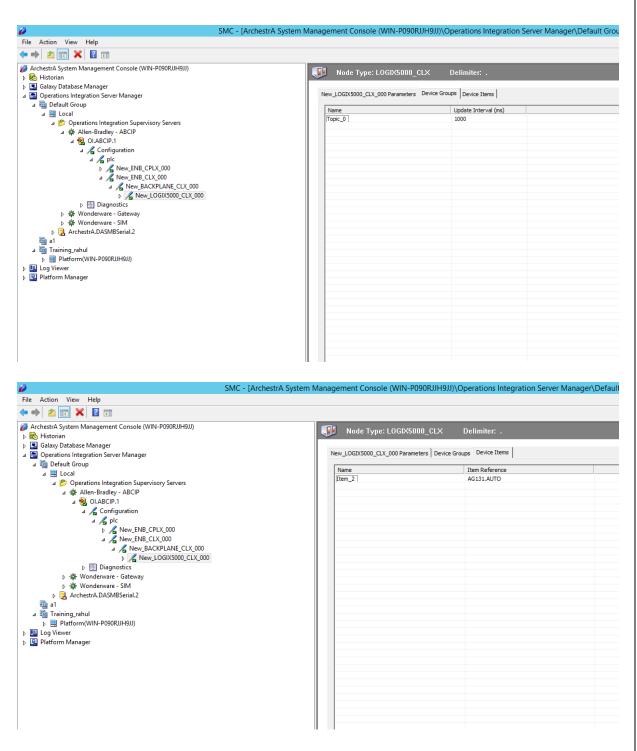




6. Right Click on Backplane and add Logix 5000 Connection and add device Group and device items.







7. Now open WW Client and check connectivity of tags as described above.



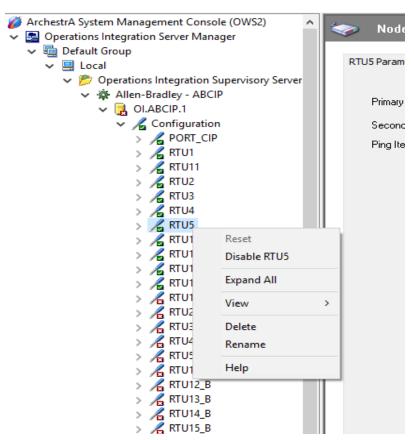
## How to Disable and Enable ABCIP RTU configuration:

Open System management Console from start menu ->Wonderware Utility ->System management Console.

ArchestrA System Management Console (OWS2) 🗸 🛃 Operations Integration Server Manager 🔄 Default Group 🗸 🔜 Local Øperations Integration Supervisory Server ✓ ☆ Allen-Bradley - ABCIP V 🛃 OI.ABCIP.1 🗸 🔏 Configuration > 🔏 PORT\_CIP RTU1
 RTU11
 RTU11
 RTU2 > 🔏 RTU3 🔏 RTU4 🔏 RTU5 KTU12 > 🔏 RTU13 > 🔏 RTU14 > 🔏 RTU15 RTU1\_B > 🔏 RTU5\_B > 🔏 RTU11\_B > 🔏 RTU12\_B > 🔏 RTU13\_B > 🔏 RTU14\_B > 🔏 RTU15\_B ...

Open and brows OI.ABCIP.1 ->Configuration as shown in Image.





Select RTU which require to Disable and Right Click on it

Here RTU1 to RTU5 and RTU 11 to RTU 15 are Configuration file for Branch Line and Here RTU1\_B to RTU5\_B and RTU 11\_B to RTU 15\_B are Configuration file for Main Line.



ABCIP Configuration require for branch line SCADA Application Running:

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$\sim$	ē,	OI.	ABCIP.1	
	$\sim$	Z	Configuration	
		>	A PORT_CIP	
		>	RTU1	
		>	2 RTU11	
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		>	🔏 RTU14_B	
		>	RTU15_B	
	>	£	Diagnostics	
>	Ę,	OI.	GATEWAY.2	
>	_		MBTCP.1	
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## ABCIP Configuration require for main line Scada Application Running:

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✓
> 🔏 PORT_CIP
> 🔏 RTU1
> 🏒 RTU11
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> 🔏 RTU3
> 🔏 RTU4
> 🔏 RTU5
> 🔏 RTU12
RTU13
> 🔏 RTU14
<ul> <li>RTU14</li> <li>RTU15</li> </ul>
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> 🔏 RTU5_B
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> 🔏 RTU12_B
> 🔏 RTU13_B
> 🔏 RTU14_B
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> M Diagnostics
> 🛃 OI.GATEWAY.2
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> 🛃 OI.SIM.1
10

END

