## EFM ABB Totalflow 'Failed to set data point' warnings from XRegisterData

This document will detail the steps needed to be able to debug the root causes for the 'Failed to set data point' warning.

Warnings from the XRegisterData logger will look similar to those shown below:

→ C O	localhost:8088/web/status/dia	g.logviewer?3	· · · · · · · · · · · · · · · · · · ·					
Gateway Scripts	le Status > Diagnostics > Logs Trial Model 1:00:15 Webe ale due la contrativité aux compares Haus fue Arthumber							
Modules								
Redundancy	Filter type to filter	<b>*⊡</b> View 100 ▼	Min. Level ALL V Live Values 🖤 🗮 📅 🖸 🖉 📥					
Reports SFCs	Logger	Time	Message					
Tags Transaction Groups	W XRegisterData	13Jan2023 09:45:46	['ABB-TF 64' 192.168.168.190:9999] Failed to set data point Register Template-0 of type Register - there is no data fro m the ABB Totalflow device X_REGISTER_DATA: [AppSlot#=10, Array#=207, Register#=0, NumberOfRegisters=10, sta tus=Vaild Frame]					
CONNECTIONS	W XRegisterData	13Jan2023 09:45:46	['ABB-TF G4' 192.168.168.190:9999] Failed to set data point String Template-0 of type STRING - there is no data from t he ABB Totalflow device X_REGISTER_DATA: [AppSlot#=10, Array#=206, Register#=0, NumberOfRegisters=10, status =Valid Frame]					
Databases Designers	W XRegisterData	13Jan2023 09:45:46	['ABB-TF G4' 192.168.168.190.9999] Failed to set data point Byte Template-0 of type BYTE - there is no data from the A B8 Totalflow device X_REGISTER_DATA: [AppSlot#=10, Array#=205, Register#=0, NumberOfRegisters=10, status=Val id Frame]					
Devices Gateway Network	W XRegisterData	13Jan2023 09:45:46	['ABB-TF G4' 192.168.168.190:9999] Failed to set data point Unsigned Int32 Template-0 of type INT32 - there is no dat a from the ABB Totalflow device X_REGISTER_DATA: [AppSlot#=10, Array#=204, Register#=0, NumberOfRegisters=1 0, status=Valid Frame]					
Store & Forward OPC Connections	W XRegisterData	13Jan2023 09:45:46	['ABB-TF G4' 192.168.168.190.9999] Failed to set data point Signed Int32 Template-0 of type INT32 - there is no data fr om the ABB Totalflow device X_REGISTER_DATA: [AppSlot#=10, Array#=203, Register#=0, NumberOfRegisters=10, st atrus=Vialid Frame]					
Vision Clients	W XRegisterData	13Jan2023 09:45:46	['ABB-TF 64' 192.168.168.190:9999] Failed to set data point Unsigned Int16 Template-0 of type INT16 - there is no dat a from the ABB Totalflow device X_REGISTER_DATA: [AppSlot#=10, Array#=202, Register#=0, NumberOfRegisters=1 0, status=34016 Frame]					
DIAGNOSTICS Execution	W XRegisterData	13Jan2023 09:45:46	[ABB-TF G4 192.168.168.190.9999] Failed to set data point Signed Int16 Template-0 of type INT16 - there is no data fr om the ABB Totalflow device X_REGISTER_DATA: [AppSlot#=10, Array#=201, Register#=0, NumberOfRegisters=10, st atus=Vialid Frame]					
Logs Metrics Dashboard	W XRegisterData	13Jan2023 09:45:46	['ABB-TF G4' 192.168.168.190.9999] Failed to set data point Float Template-0 of type FLOAT - there is no data from the ABB Totalflow device X_REGISTER_DATA: [AppSlot#=10, Array#=200, Register#=0, NumberOfRegisters=10, status=V alid Frame]					
Running Scripts Threads	W XRegisterData	13Jan2023 09:45:46	['ABB-TF G4' 192.168.168.190:9999] Failed to set data point Float64 Template-9 of type DOUBLE - there is no data m the ABB Totalflow device X_REGISTER_DATA: [AppSlot#=10, Array#=9, Register#=1, NumberOfRegisters=9, st =Valid Frame]					
	W XRegisterData	13Jan2023 09:45:46	['ABB-TF G4' 192.168.168.190:9999] Failed to set data point Uint64 Template-3 of type UINT64 - there is no data from he ABB Totalflow device X_REGISTER_DATA: [AppSlot#=10, Array#=8, Register#=1, NumberOfRegisters=9, status=Va IId Frame)					

The logged warning includes details that will help in identifying the points in the Array-Register template that are cause this warning.

- The message is prepended with the Device Name, Hostname and TCP Port
- The message is appended with the X\_REGISTER\_DATA showing the AppSlot#, Array#, Register#, NumberOfRegisters and status

For example if we look at the highlighted entry shown above, the warning is coming from the Device Name of ABB-TF G4 and a Hostname of 192.168.168.190 and X\_REGISTER\_DATA of [AppSlot#=10, Array#=7, Register#=1, NumberOfRegisters=9, status=Valid Frame]

Now, we should find the AppSlot# 10 in the list of the Totalflow applications by navigating to Config > Opcua > Devices and selecting *Totalflow Applications* from the More dropdown for your device. This will display similarly to below:

C D localitost.808	ojweb/comg/opcda.devices:10					
on					ł	Help 🛛 Get Designe
YSTEM	Config > Opcua > Devices					
Overview	Trial Mode 1:42:45 We're glad you're test driving our software. Have fun.					Activate Igni
Backup/Restore Ignition Exchange Licensing	Choose File No file chosen					
Modules Projects Redundancy	Import Configuration					
Gateway Settings	Export Configuration					
IETWORKING						
Web Server Gateway Network	Application: Name	Slot #	Enum	Revision	Туре	Polling Enabled
Email Settings	System	0	0	2103282-010	System	
ECURITY General	Totalflow/TCP	1	3	2101348-005	Com	
Auditing Users, Roles	Totalflow/USB	2	3	2101340-005	Com	
Service Security Identity Providers	Totalflow/COM0:	3	3	2101340-005	Com	
Security Zones	I/O Simulation	7	100	2101301-001	Sim	
ATABASES Connections	Display	8	2	2103137-001	IOS	
Drivers Store and Forward	Holding Registers	9	10	2101312-002	System	
LARMING	Operations	10	18	2101320-005	System	
General Journal	AGA3-1	11	4	2101306-006	Tube	<ul><li>✓</li></ul>
Notification On-Call Rosters Schedules	AGA7-1	12	5	2101307-007	Tube	
AGS	SUAGA3-2	13	20	2103741-007	Tube	<b>~</b>
C. Seerch	CUACAT D	14	21	2102742 009	Tuba	

Note that the application name is 'Operations' and its AppEnum# is 18.

Next we need to look at the Array-Register templates and find a template for AppEnum# 18 by navigating to Config > Opcua > Devices and selecting Array-Register Templates from the More dropdown for your device.

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This will display similarly to below where the AppEnum is the identified as part of the Totalflow Application name.

C D localhost:aud	8/web/contig/opcua.devices?22				□ ☆ ⊔
-MacBook-Pro.local					±admin   Le
ion					Help 🛛 Get Desig
SYSTEM	Config > Opcua > Devices				
Overview	Trial Mode 1:37:42 We're glad you're test driving our software. Have fi	un.			Activate
Backup/Restore					
Ignition Exchange					
Licensing	Choose File No file chosen				
Modules					
Projects	Import Configuration				
Redundancy					
Gateway Settings	Export Configuration Export as 'F	ree Form'			
NETWORKING					
Web Server					
Gateway Network	Name	Totalflow Application	INI Files	Array-Register Template	
Email Settings					
	Dflt. Operations App	Operations App [18] 2101320]	View INI Files	Edit Array-Register Template Contents	[delete]
SECURITY					
General	Dflt. AGA3 Tube App	AGA3 Tube App [4_2101306]	View INI Files	Edit Array-Register Template Contents	[delete]
Auditing					
Users, Roles					
Service Security	Dflt. AGA7 Tube App	AGA7 Tube App [5_2101307]	View INI Files	Edit Array-Register Template Contents	[delete]
Identity Providers					
Security Levels	Dflt_SU Gas Orifice Tube App	SU Gas Orifice Tube App [20_2103741]	View INI Files	Edit Array-Register Template Contents	[delete]
Security Zones	one of our office rate hpp			carefully register template contents	
DATABASES					
Connections	Dflt. SU Turbine Tube App	SU Turbine Tube App [21_2103742]	View INI Files	Edit Array-Register Template Contents	[delete]
Drivers					
Store and Forward	Dflt_SUVCONF App	SU VCONE App [53_2104039]	View INI Files	Edit Array-Register Template Contents	[delete]
	one of concrept			contrary negotier template contents	
ALARMING					
General	Dflt. Coriolis Tube App	Coriolis Tube App [55_2103980]	View INI Files	Edit Array-Register Template Contents	[delete]
Notification	Dflt V-Cone Tube App	V-Cone Tube App [23_2103753]	View INI Files	Edit Array-Register Template Contents	[delete]
On-Call Rosters	and a some rube App			contento, negota remplate contento	
schedules			-		

If you are not using the template associated with the AppEnum, in our example it is Dflt. Operations App, you can simply disable this template to remove the warning messages.

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If you are using only some of the registers within this template, select Edit Array\_Register Template Contents. This will display similarly to below and we can disable the array registers identified in the warning message.

In our example of X\_REGISTER\_DATA: [AppSlot#=10, Array#=7, Register#=1, NumberOfRegisters=9, status=Valid Frame] we would be looking at Array 7 Registers 1 through 9.

Ignition-MacBook-	Pro.local - Ig × +							
$\rightarrow$ C (i) localhost:808	8/web/config/opcua.devices	?22						ô 🖈 🛛 🄇
nition-MacBook-Pro.local						_	Н	±admin   Log Get Design
SYSTEM	Config > Opcua > Dev	rices						
Overview Backup/Restore	Trial Mode 1:29:25 We	're glad you're test driving our s	oftware. Have fun.					Activate Ign
Ignition Exchange Licensing	Choos	<b>Se File</b> No file chosen						
Modules Projects			_			_		×
Redundancy Gateway Settings	6	0 -	RW Register	Periodic	Output	Output		[delete]
NETWORKING Web Server	7	0 -	RO FLOAT	Math	Operation 1	Operation 1		[delete]
Gateway Network Email Settings	7	1	RW INT64	Int64 Template	Int64 Template-1	Int64 Template-1		(delete)
SECURITY				into remplate		into reinplace 1		
General Auditing Users Roles	7 *	2 🔻	RW INT64	Int64 Template	Int64 Template-2	Int64 Template-2		[delete]
Service Security Identity Providers	7 *	3 -	RW INT64	Int64 Template	Int64 Template-3	Int64 Template-3		[delete]
Security Levels Security Zones	7 💌	4 🔻	RW INT64	Int64 Template	Int64 Template-4	Int64 Template-4		[delete]
DATABASES	7 *	5 🔻	RW INT64	Int64 Template	Int64 Template-5	Int64 Template-5		[delete]
Drivers Store and Forward	7	6 🔻	RW INT64	Int64 Template	Int64 Template-6	Int64 Template-6		[delete]
ALARMING	7 *	7	RW INT64	Int64 Template	Int64 Template-7	Int64 Template-7		[delete]
Journal Notification	7	8 *	RW INT64	Int64 Template	Int64 Template-8	Int64 Template-8		[delete]
On-Call Rosters Schedules	7	9 -	RW INT64	Int64 Template	Int64 Template-9	Int64 Template-9		[delete]
Q Search	8 -	0 -	RW BYTE	Math	Operation	Operation		[delete]

If you are using the template associated with the AppEnum, then there will be additional work with both the INI file, which you can open by selecting the View INI Files link, and the flow computer configuration.

Additional details to follow

## **Additional Resources**

- Inductive Automation's Ignition download with free trial
   <sup>o</sup> Current Ignition Release
- Cirrus Link Solutions Modules for Ignition
  - Ignition Strategic Partner Modules
- Support questions
  - Check out the Cirrus Link Forum: https://forum.cirrus-link.com/
  - Contact support: support@cirrus-link.com
- Sales questions
  - Email: sales@cirrus-link.com
  - Phone: +1 (844) 924-7787
- About Cirrus Link
  - https://www.cirrus-link.com/about-us/