



ABB MEASUREMENT & ANALYTICS | How To

FlowX & Flow-Xpress



Output window errors and corrections

Measurement made easy

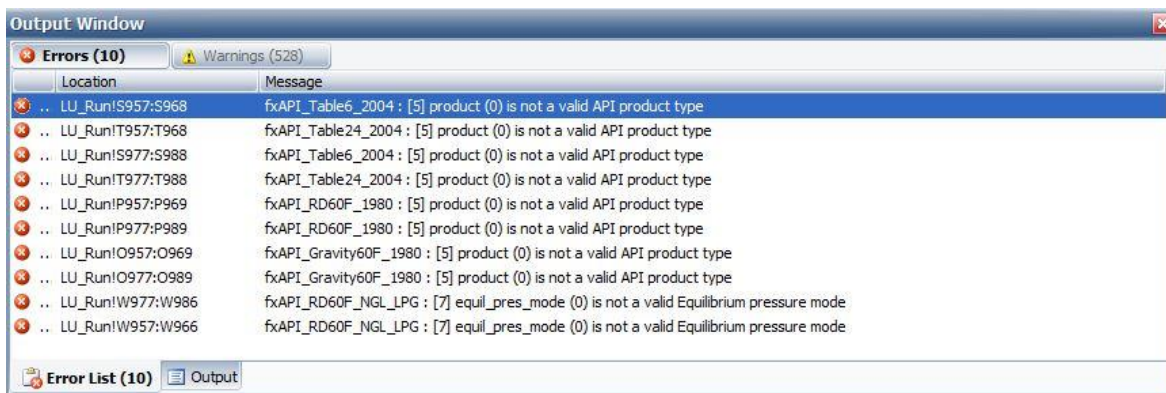
Issue

In 2013 Flow-Xpress was updated with new enhancements. As a result, when an application that was developed using older versions of Flow-Xpress are opened in newer versions of Flow-Xpress, Output window errors may generate requiring the user to correct the application before it can be uploaded.

For more information

Contact Support
totalflowsupport@us.abb.com or
Phone 800-442-3097 (US)

Output window errors



The following errors may be generated:

- fxAPI_Table6_2004 : [5] product (0) is not a valid API product type
- fxAPI_Table24_2004 : [5] product (0) is not a valid API product type
- fxAPI_Table6_2004 : [5] product (0) is not a valid API product type
- fxAPI_Table24_2004 : [5] product (0) is not a valid API product type
- fxAPI_RD60F_1980 : [5] product (0) is not a valid API product type
- fxAPI_Gravity60F_1980 : [5] product (0) is not a valid API product type
- fxAPI_RD60F_1980 : [5] product (0) is not a valid API product type
- fxAPI_Gravity60F_1980 : [5] product (0) is not a valid API product type
- fxAPI_RD60F_NGL_LPG : [7] equil_pres_mode (0) is not a valid Equilibrium pressure mode
- xAPI_RD60F_NGL_LPG : [7] equil_pres_mode (0) is not a valid Equilibrium pressure mode

Why are the errors being generated?

These errors are not due to an issue with the API algorithms used in previous versions of Flow-Xpress. The errors are generated in the section of the application that recalculates a historical batch. By default, the API product type and Equilibrium vapor pressure were allowed to be set to initial value of 0. This is no longer allowed in the application and Flow-Xpress will generate the errors when opening and compiling the application.

Correction

- Open the application using Flow-Xpress and enter the “Professional Mode”
- Select the LU_RUN yellow tab sheet.

The screenshot shows the Flow-Xpress Professional Mode interface. The LU_RUN tab is selected. The interface displays a table of process parameters and a table of meter parameters. A red arrow points to the 'Meter pres.' column in the meter parameters table. An 'Error List (538)' dialog box is open, showing 'GPA TP-15 out of range'.

Step 1

- Select Cell F832 on the worksheet.
- It will contain the formula “=fxTag(fxName("B01_PRDTYPE","Last batch product type","Historical batch data"),0,xt_num,,TRUE)”
- Change the number in the formula from “),0,xt_num” to “),1,xt_num”
- The formula should now read “=fxTag(fxName("B01_PRDTYPE","Last batch product type","Historical batch data"),1,xt_num,,TRUE)”

The screenshot shows the Flow-Xpress Professional Mode interface. The formula bar at the top shows the formula for cell F832: `=fxTag(fxName("B01_PRDTYPE","Last batch product type","Historical batch data"),0,xt_num,,TRUE)`. A red arrow points to the 'Last' column in the 'Historical batch data' table.

	Previous	Last	Last but 1	Last but 2	Last but 3	Selected
Recalc number	0	0	0	0	0	0
Batch ID	0	---	0	---	0	---
Batch number	0	0	0	0	0	0
Product number	0	0	0	0	0	0
Product name	0	---	---	---	---	---
API calculation version	0	0	0	0	0	0
API product type	0	0	0	0	0	0
Density conversion table	0	0	0	0	0	0
Equil. pres. method	1	0	0	0	0	0
Equil. pres. set value	0	0	0	0	0	0
F factor override enabled	0	0	0	0	0	0
F factor override value	0	0	0	0	0	0
GPA TP-15 P100 cor. enabled	0	0	0	0	0	0
Vapor pressure at 100 degF	0	0	0	0	0	0
Observed density input type	0	0	0	0	0	0
Start date/time	12/Jan/2016 11:24:59	00/Jan/1900 00:00:00	00/Jan/1900 00:00:00	00/Jan/1900 00:00:00	00/Jan/1900 00:00:00	00/Jan/1900 00:00:00
End date/time	00/Jan/1900 00:00:00	00/Jan/1900 00:00:00	00/Jan/1900 00:00:00	00/Jan/1900 00:00:00	00/Jan/1900 00:00:00	00/Jan/1900 00:00:00
Forward values						
Run time	0	0	0	0	0	0

Step 2

- Select Cell F834 on the worksheet.
- `=fxTag(fxName("B01_PE_OVREN","Last batch Pe method","Historical batch data"),0,xt_num,,TRUE)`
- Change the number in the formula from `(,0,xt_num` to `,)1,xt_num`
- The formula should now read `=fxTag(fxName("B01_PE_OVREN","Last batch Pe method","Historical batch data"),1,xt_num,,TRUE)`

B01_PE_O... : X ✓ F8 <code>=fxTag(fxName("B01_PE_OVREN","Last batch Pe method","Historical batch data"),0,xt_num,,TRUE)</code>													
809	Pressure proportional gain factor				0.2				Flow / pressure control mode				2
810	Pressure integral gain factor				0.01				Pressure limit mode (maximum or minimum limit)				1
811	Pressure control direction (0: forward, 1: reverse)				0				Pressure limit value				0
812	Pressure at 4 mA				0				Enable Pressure control when outside low /high limit				0:00:00
813	Pressure at 20 mA				100				Disable Pressure control when inbetween limits				0:00:00
814	TRACKING VARIABLES								Copy limit to setpoint when Pressure Control enabled				0:00:00
815	Pressure setpoint value (not used; only required for tracking)				0				Force control mode to Flow when Pressure control is disabled				0:00:00
816	Pressure manual output (not used; only required for tracking)				0								
817	Tracking mode (for bumpless transfer)				0				ANALOG OUT				
818	Copy function required to avoid circular reference -->				0:00:00				Analog output module		Assignment descriptor		-1
819	Tracking percentage (for bumpless transfer)				0				Analog output channel				1
820	Copy function required to avoid circular reference -->				0:00:00				Set analog output				0:00:00
821													
822													
823	Historical batch data <i>For the 4 last batches either the forward or reverse values are stored in separate registers</i>												
824													
825													
826	Recalc number	Previous	Last	1	2	3	4	5	6	7	8	9	Selected
827	Batch ID	0	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0
828	Batch number	0	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0
829	Product number	0	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0
830	Product name	0	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0
831	API calculation version	0	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0
832	API product type	0	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0
833	Density conversion table	0	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0
834	Equil. pres. method	1	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0
835	Equil. pres. set value	0	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0
836	F factor override enabled	0	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0
837	F factor override value	0	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0
838	GPA TP-15 P100 cor. enabled	0	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0
839	Vapor pressure at 100 degF	0	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0
840	Observed density input type	0	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0
841	Start date/time	12/Jun/2018 11:24:59	00/Jan/1900 00:00:00	0:00:00	00/Jan/1900 00:00:00	0:00:00	00/Jan/1900 00:00:00	0:00:00	00/Jan/1900 00:00:00	0:00:00	00/Jan/1900 00:00:00	0:00:00	00/Jan/1900 00:00:00
842	End date/time	00/Jan/1900 00:00:00	00/Jan/1900 00:00:00	0:00:00	00/Jan/1900 00:00:00	0:00:00	00/Jan/1900 00:00:00	0:00:00	00/Jan/1900 00:00:00	0:00:00	00/Jan/1900 00:00:00	0:00:00	00/Jan/1900 00:00:00
843	Forward values												
844	Run time	0	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0	0:00:00	0

Step 3

- Compile the application.
- All errors should now be resolved and the application can be loaded to the FlowX.

If this does not correct the issues, please contact ABB for assistance.



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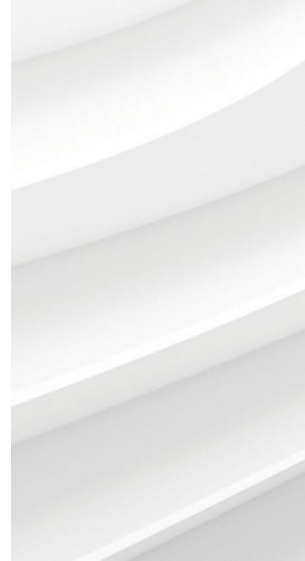
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