

# **Technical Issue Notification**

TECHNICAL SUPPORT P/N TIN00023

# EST4: N Var functionality in rule scripts

# Introduction

This Technical Issue Notification is to inform you that the Edwards business is aware of an issue with N Variables. Currently when writing rules in the 4-CU which contain N Variables can result in those rules not capturing all devices within the specified range, when the device type is not specified on the input side of the rule.

#### Issue

N Variable objects are not being found when a rule is written to include devices within the specified numerical value range

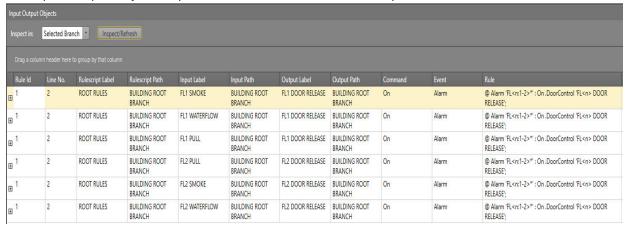
When using the N Variable feature in the EST4 4-CU there are times based on how the rule is formatted, it will not capture devices in the rule. During these scenarios the "Input/Output Objects Rules Report" may incorrectly show that the input and output objects are being pulled from the actual rule. The examples below show the issue being present and what you are likely to encounter.

#### Example numbered list:

- 1. Device type not specified with issue present.
  - Rule Example:

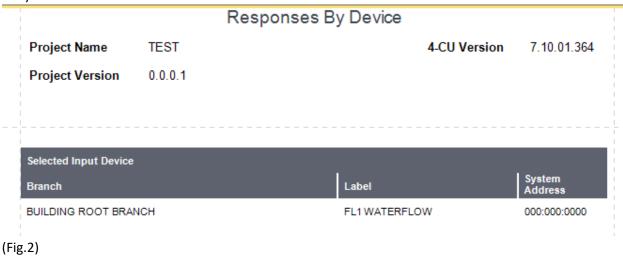
//FLOOR ALARM DOOR RELEASE

- @ Alarm 'FL<n:1-2>\*': On .DoorControl 'FL<n> DOOR RELEASE';
- The Input/Output Objects Report for the Door Release rule example:



- (FIG.1)

- In Fig. 1 above notice that a check of the Input/Output Objects report shows Input devices on Floors 1&2 turning On the Door Release relays for Floors 1&2.
- In Fig.2 below running the Responses by Device Report for the Floor 1 Waterflow, only has one line. The Input device is listed but no Output devices. Based on this report we can now see that Door Release relay on Floor 1 will not activate.



# Solution

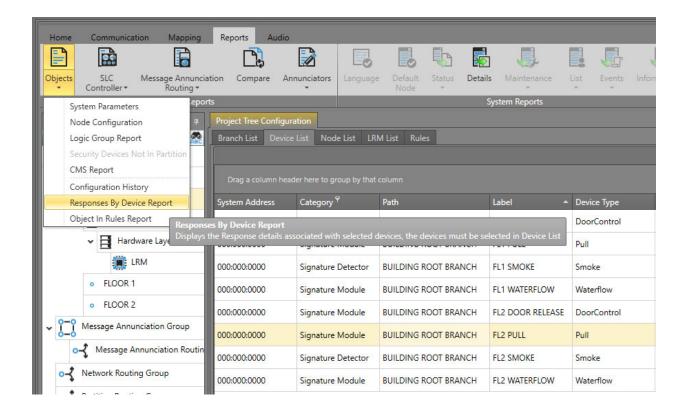
The technical issue is still under investigation and the Edwards business will provide you with a solution once the issue is resolved.

Run the Responses by Device Report in the 4-CU to verify that the rulescripts is working as intended.

How to run the Responses by Device Report:

- 1. Select an object in your branch, can be a smoke, heat, etc.
- 2. Go to the Objects button on the ribbon bar in the top left.
- 3. Select Responses by Device Report in the drop down and let the report run, picture below.

P/N TIN00023 • REV 001 • 2 / 6

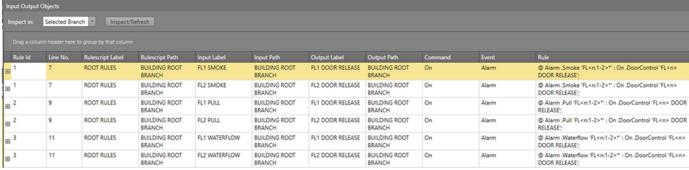


Adding the Device type into the rulescript will prevent the issue. In the rules example below we are using the same rule script shown in the Issue section but have edited the rules to include the device types.

- Rule Example:
  - //FLOOR ALARM DOOR RELEASE SPECIFYING INPUT EVENT BY DEVICE TYPE
  - @ Alarm .Smoke 'FL<n:1-2>\*': On .DoorControl 'FL<n> DOOR RELEASE';
  - @ Alarm .Pull 'FL<n:1-2>\*': On .DoorControl 'FL<n> DOOR RELEASE';
  - @ Alarm .Waterflow 'FL<n:1-2>\*' : On .DoorControl 'FL<n> DOOR RELEASE';

#### Input/Output Objects Report:

Once again running the Input/Output Objects Report will show our input and output devices being activated.



(Fig.3)

P/N TIN00023 • REV 001 • 3 / 6

Responses by Device Report with Device types in rule shows the input and output devices:

Figures 4,5 &6 below now show the door relays as part of the rule script when running the Response by Device report..

Responses By Device							
Project Name	TEST		4-CU Version	on 7.10.01.364			
Project Version	0.0.0.2						
Selected Input Device							
Branch		Label		System Address			
BUILDING ROOT BRAI	NCH	FL1 PUL	L	000:000:0000			
Rule Event Inform	nation						
Prefix		Event Type					
Alarm							
Command Inform	ation						
Direction	Comman	d Type	Description				
	Activate		Output, Priority Low				
Devices Affected By t	he Command						
Branch		Label		stem Address			
BUILDING	ROOT BRANCH	FL1 DO	OR RELEASE 000	:000:0000			

(Fig.4 Response report for Pull)

P/N TIN00023 • REV 001 • 4 / 6

### Responses By Device Project Name TEST 4-CU Version 7.10.01.364 Project Version 0.0.0.2 Selected Input Device System Address Label Branch BUILDING ROOT BRANCH FL1 SMOKE 000:000:0000 Rule Event Information Event Type Prefix Alarm Command Information Command Type Description Direction Activate Output, Priority Low **Devices Affected By the Command** Label Branch System Address

FL1 DOOR RELEASE

000:000:0000

(Fig.5 Response by Device Report for Smoke)

**BUILDING ROOT BRANCH** 

P/N TIN00023 • REV 001 • 5 / 6

Responses By Device							
Project Name	TEST			4-CU Versi	ion 7.10.01.364		
Project Version	0.0.0.1						
Selected Input Device							
Branch			Label		System Address		
BUILDING ROOT BRANCH		FL1 WAT	ERFLOW	000:000:0000			
Rule Event Inform	ation						
Prefix			Event Type				
1			Alarm				
Command Informa	tion						
Direction		Command Type		Description			
I I I		Activate	Output, Priority Low				
Devices Affected By th	e Command						
Branch			Label		ystem Address		
BUILDING ROOT BRANCH			FL1 D00	R RELEASE 00	0:000:0000		

(Fig.6 Response by Device Report for Waterflow)

P/N TIN00023 • REV 001 • 6 / 6