



APLC
STUDIO

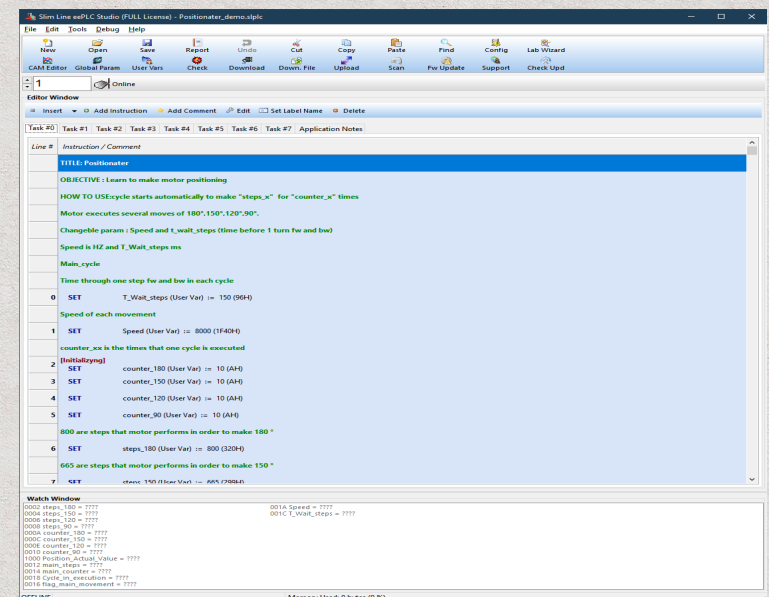
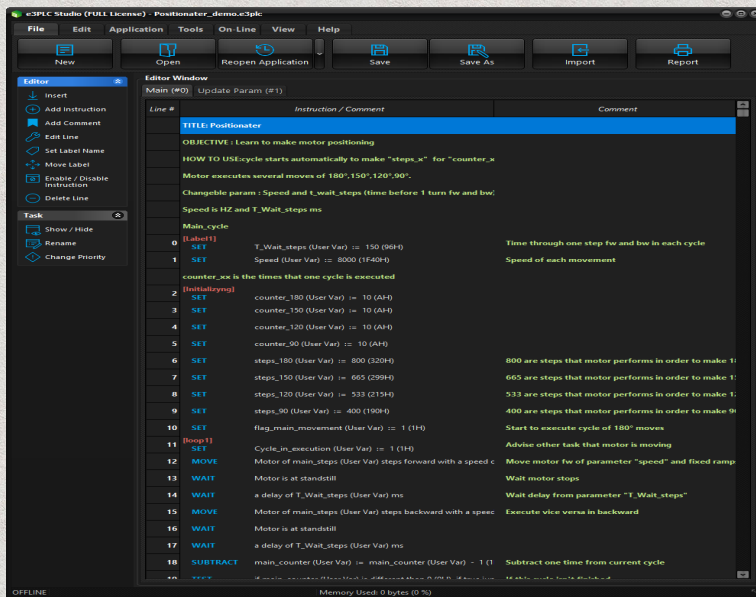
***E* ever**
ELETRONICA
the clever drive

News compared to eePLC

- Renewed graphics
- Support with high resolution screens (Windows 10 HighDPI)
- Light, dark and classic themes

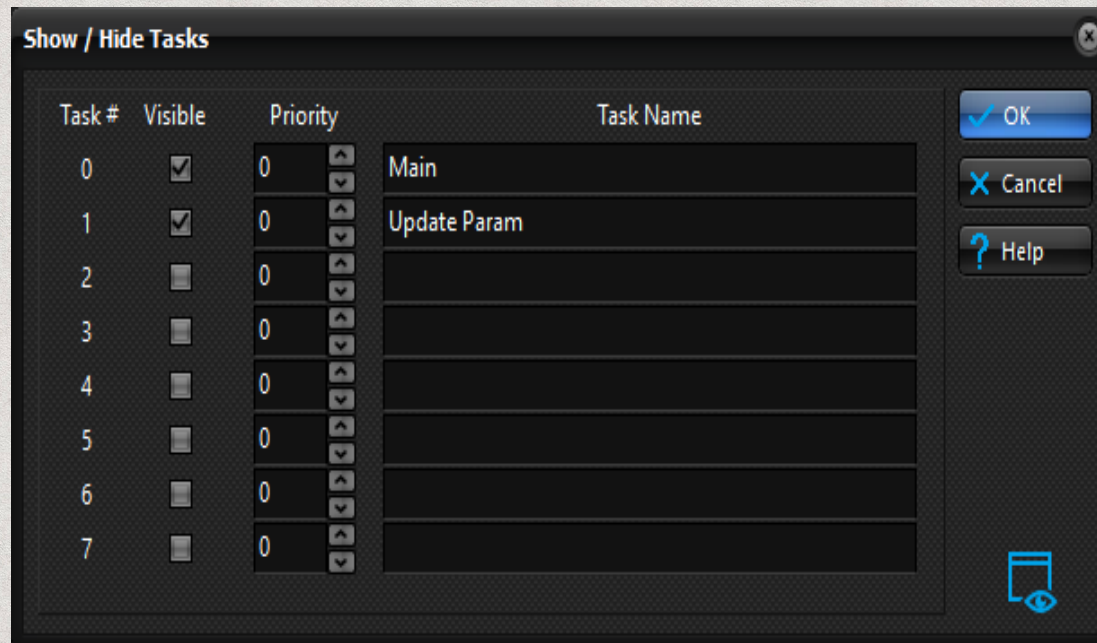
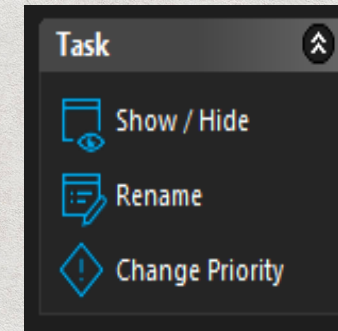
e3PLC for Titanio

eePLC for SlimLine



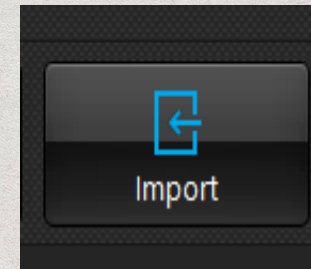
News compared to eePLC

- **New tasks management**
- Possibility to hide empty tasks
- Task panel in the main window



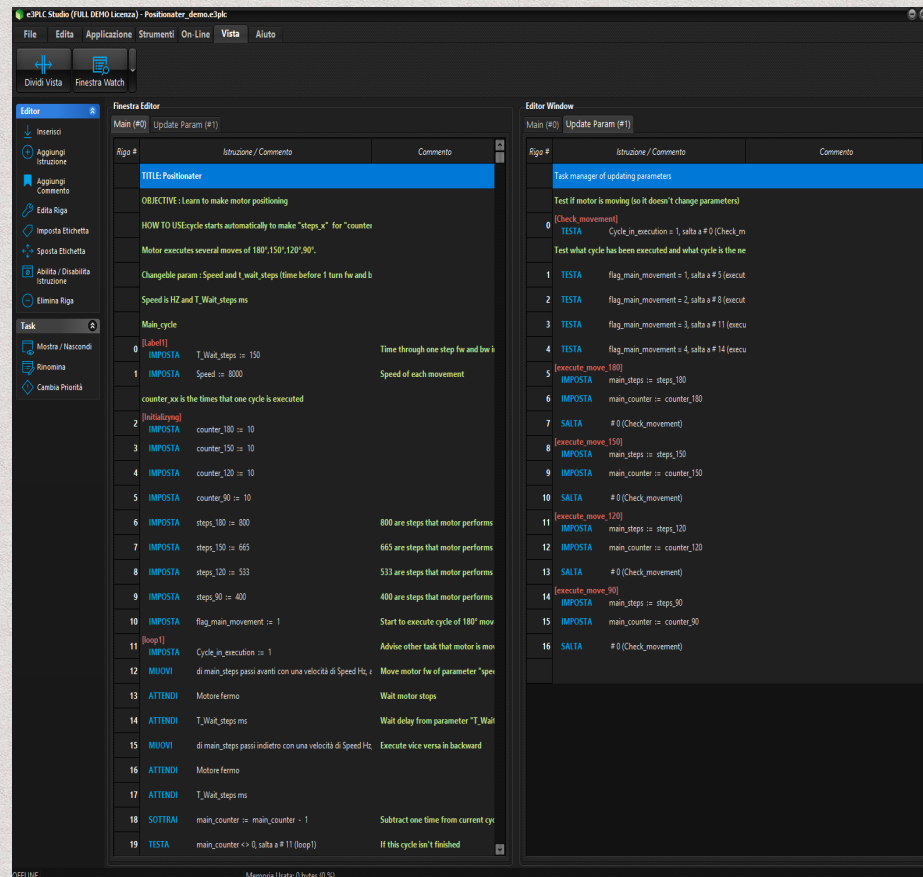
News compared to eePLC

- New format file .e3plc
- Possibility to import old .eePLC files



News compared to eePLC

- **Split Pane functionality**
- Possibility to display two tasks side by side



News compared to eePLC

- **Comments on each instruction line**
- Possibility to resize the columns “Instruction” and “Comment”

<i>Line #</i>	<i>Instruction / Comment</i>	<i>Comment</i>
0	[Label1] SET T_Wait_steps (User Var) := 150 (96H)	Time through one step fw and bw in each cycle



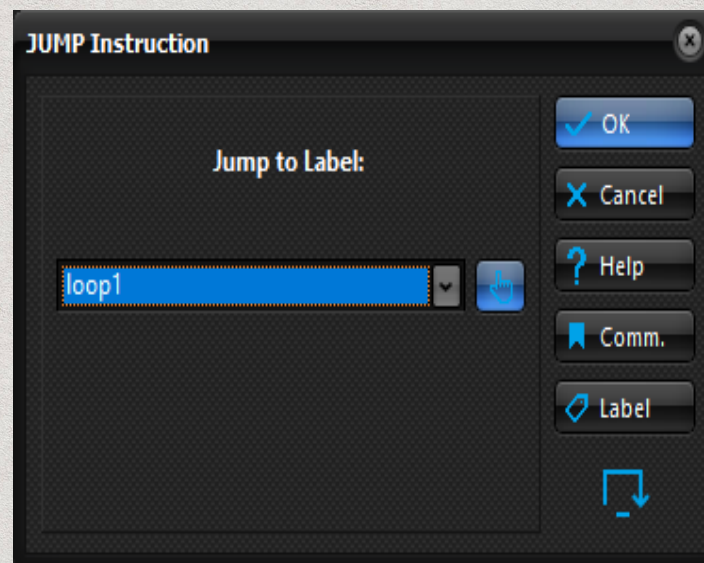
Improvements compared to eePLC

- **More space for the user application** (~ 5 volte greater)
- **More speed of execution**
 - (eePLC SlimLine: ~100 μ s for each instruction)
 - (e3PLC Titanio : ~10 μ s for each instruction)



Improvements compared to eePLC

- Improved Label management
- Insertion guided by JUMP, TEST and CAL instructions
- Move Label functionality
- Possibility to define the labels during the editing of the instructions



Improvements compared to eePLC

- Watch Window position selectable (bottom or right)
- Possibility to hide Watch Window (more space for program editing)

The image displays two side-by-side screenshots of the e3PLC Studio software interface, demonstrating the flexibility of the Watch Window placement. Both screenshots show the same ladder logic program in the Editor Window, with the Watch Window positioned either at the bottom or on the right side of the interface.

Left Screenshot: The Watch Window is positioned at the bottom of the interface. The Editor Window shows a ladder logic program with the following instructions:

Line #	Instruction / Comment	Comment
0	[Label1] SET T_Wait_steps (User Var) := 150 (Time through one s
1	SET Speed (User Var) := 8000 (1F40)	Speed of each mov
counter_xx is the times that one cycle is execut		
2	[Initialzng] SET counter_180 (User Var) := 10 (A	
3	SET counter_150 (User Var) := 10 (A	
4	SET counter_120 (User Var) := 10 (A	
5	SET counter_90 (User Var) := 10 (A)	
6	SET steps_180 (User Var) := 800 (320)	800 are steps that n
7	SET steps_150 (User Var) := 665 (299)	665 are steps that n
8	SET steps_120 (User Var) := 533 (215)	533 are steps that n
9	SET steps_90 (User Var) := 400 (190)	400 are steps that n
10	SET flag_main_movement (User Var)	Start to execute cy
11	[loop1] SET Cycle_in_execution (User Var) :=	Advise other task ti
12	MOVE Motor of main_steps (User Var) :	Move motor fw of s

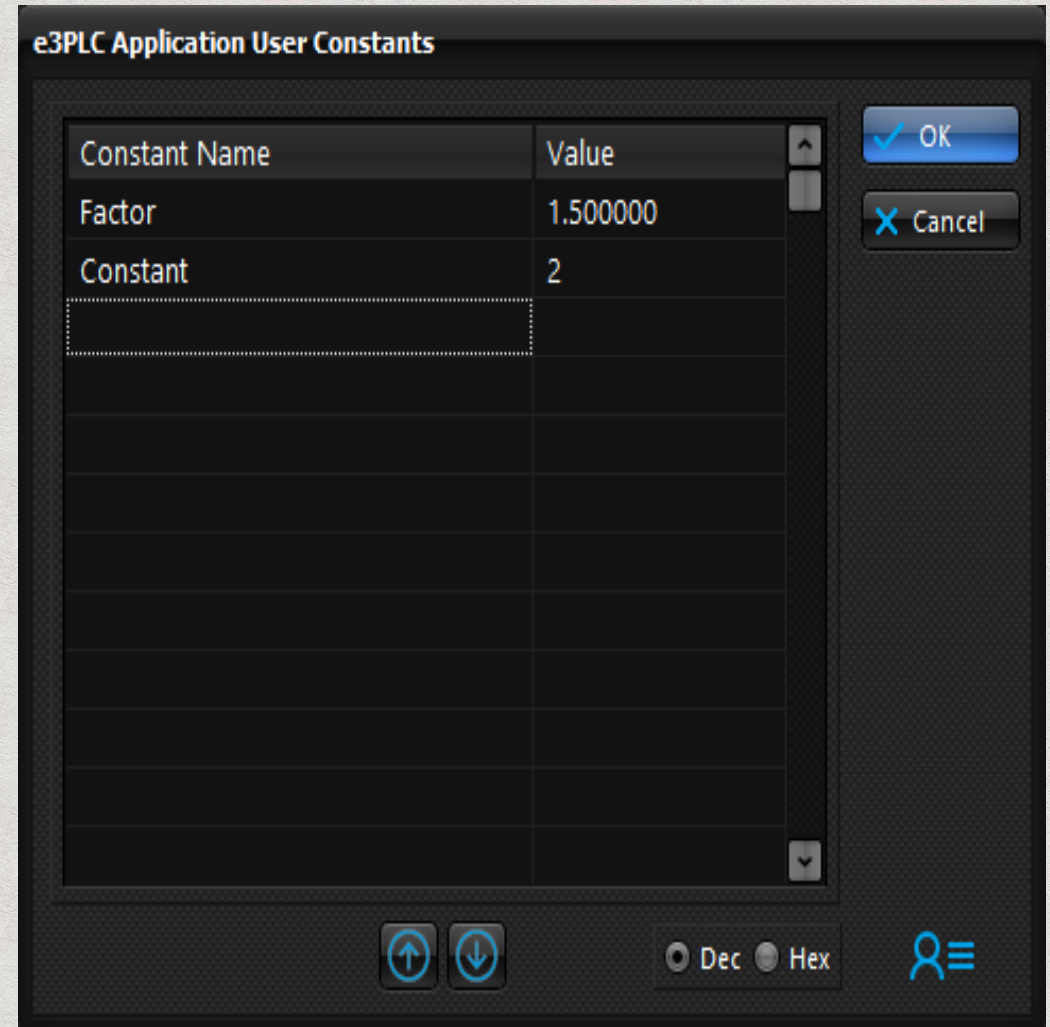
Right Screenshot: The Watch Window is positioned on the right side of the interface. The Editor Window shows the same ladder logic program as the left screenshot. The Watch Window displays the following data:

Line #	Instruction / Comment	Value
0	[Label1] SET T_Wait_steps (User Var) :=	150
1	SET Speed (User Var) := 8000 (8000
2	[Initialzng] SET counter_180 (User Var) :=	10
3	SET counter_150 (User Var) :=	10
4	SET counter_120 (User Var) :=	10
5	SET counter_90 (User Var) := 1	1
6	SET steps_180 (User Var) := 80	800
7	SET steps_150 (User Var) := 66	665
8	SET steps_120 (User Var) := 53	533
9	SET steps_90 (User Var) := 400	400
10	SET flag_main_movement (User	0
11	[loop1] SET Cycle_in_execution (User V	0
12	MOVE Motor of main_steps (User	0



Improvements compared to eePLC

- User Constants:
 - Move function
 - Rename function
 - Duplicate check



Improvements compared to eePLC

- Possibility to select the Editor display mode
- Detailed (as with eePLC)
- Simple (more concise, suitable for side by side Tasks)

Editor View

Detailed

17	WAIT	a delay of T_Wait_steps (User Var) ms
18	SUBTRACT	main_counter (User Var) := main_counter (User Var) - 1 (1H)
19	TEST	if main_counter (User Var) is different than 0 (0H), if true jump to line # 11
20	WAIT	a delay of 2000 (7D0H) ms
21	SET	Cycle_in_execution (User Var) := 0 (0H)

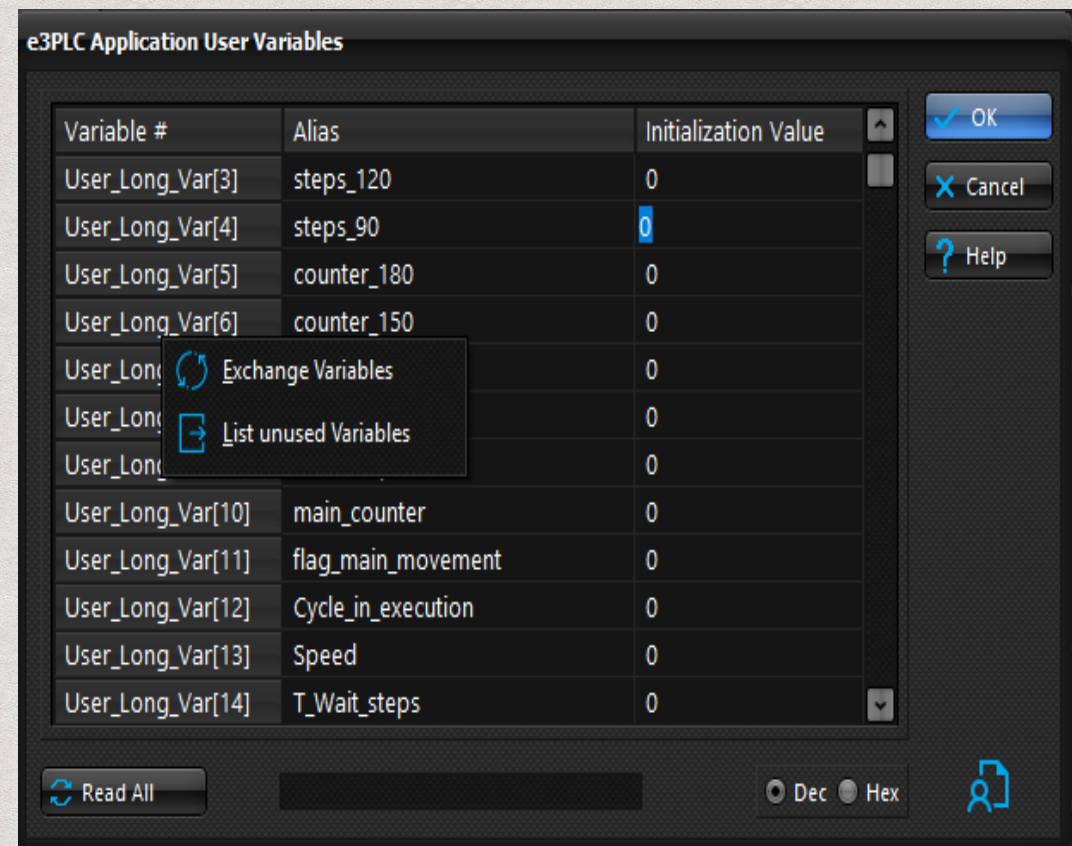
Simple

17	WAIT	T_Wait_steps ms
18	SUBTRACT	main_counter := main_counter - 1
19	TEST	main_counter <> 0, jump to # 11 (loop1)
20	WAIT	2000 ms
21	SET	Cycle_in_execution := 0



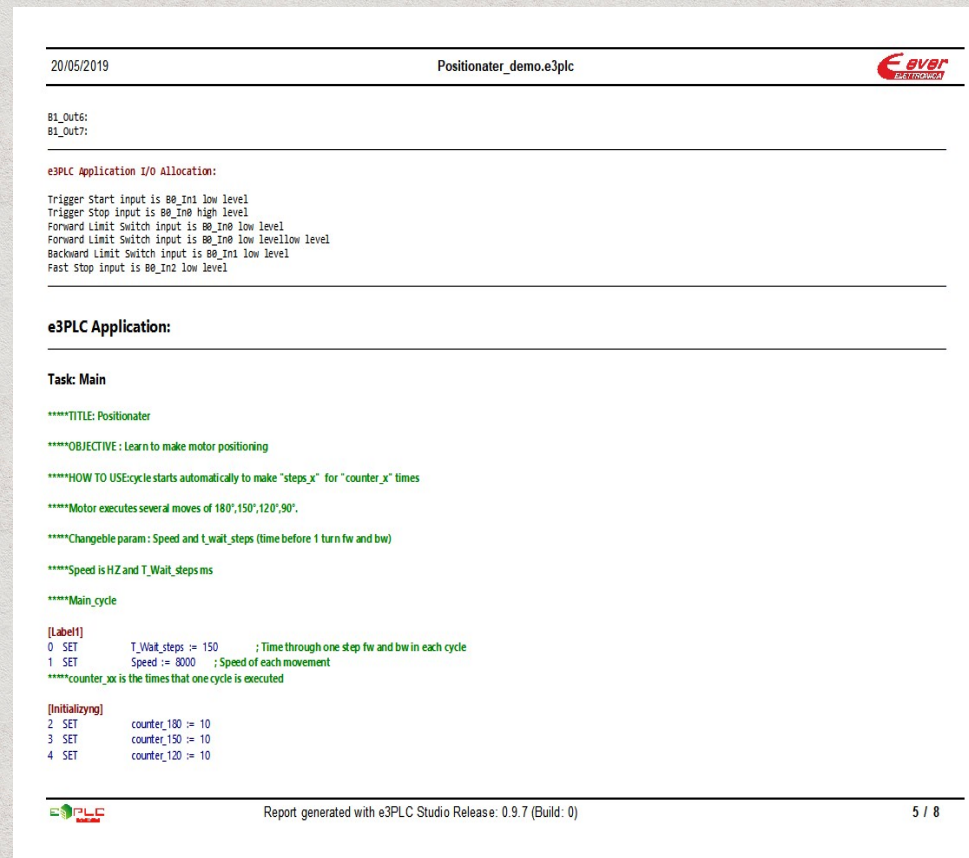
Improvements compared to eePLC

- User variables:
- Control function and cancellation of unused variables



Improvements compared to eePLC

- Graphic format report
- Possibility of exporting files in PDF, RTF, CSV, etc.



The screenshot displays a report generated by e3PLC Studio. At the top, the date '20/05/2019' and the project name 'Positionater_demo.e3plc' are shown, along with the Ever Automation logo. The report content includes:

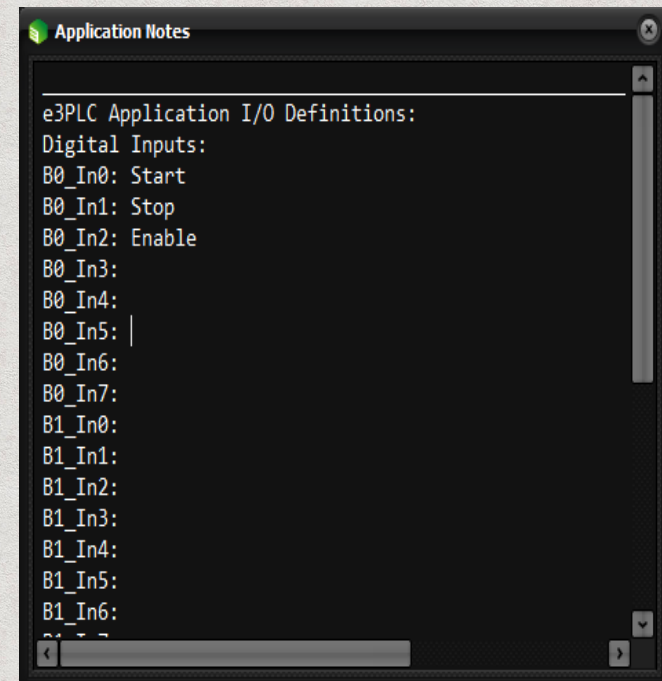
- I/O Allocation:** A list of inputs and outputs with their respective levels (e.g., 'Trigger start input is 00_In1 low level').
- e3PLC Application:** A section containing:
 - Task: Main**
 - ****TITLE: Positionater**
 - ****OBJECTIVE: Learn to make motor positioning**
 - ****HOW TO USE: cycle starts automatically to make "steps_x" for "counter_x" times**
 - ****Motor executes several moves of 180°,150°,120°,90°.**
 - ****Changeable param: Speed and T_wait_steps (time before 1 turn fw and bw)**
 - ****Speed is HZ and T_Wait_steps ms**
 - ****Main_cycle**
 - [Label1]**
 - 0 SET T_Wait_steps := 150 ; Time through one step fw and bw in each cycle
 - 1 SET Speed := 8000 ; Speed of each movement
 - ****counter_xx is the times that one cycle is executed**
 - [Initializing]**
 - 2 SET counter_180 := 10
 - 3 SET counter_150 := 10
 - 4 SET counter_120 := 10

The footer of the report shows the e3PLC logo, the text 'Report generated with e3PLC Studio Release: 0.9.7 (Build: 0)', and the page number '5 / 8'.



Improvements compared to eePLC

- Application notes:
 - Display in separate window (always visible during program editing)
 - Possibility to insert the I/O description



```
Application Notes
e3PLC Application I/O Definitions:
Digital Inputs:
B0_In0: Start
B0_In1: Stop
B0_In2: Enable
B0_In3:
B0_In4:
B0_In5: |
B0_In6:
B0_In7:
B1_In0:
B1_In1:
B1_In2:
B1_In3:
B1_In4:
B1_In5:
B1_In6:
```



Improvements compared to eePLC

- Improved debug:
 - Debug dedicated tab
 - Scope Monitor: Graphical display of motion parameters



