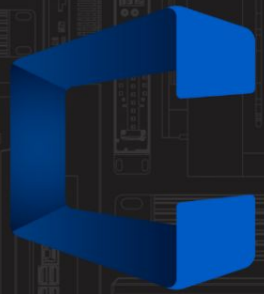


CICON

TRAINING

CM1 + CM3 SERIES PLC PROGRAMMING

CIMON
AUTOMATION

UNIT1

01 CREATE A NEW CICON PROJECT

02 CONFIGURE A VIRTUAL CHASSIS

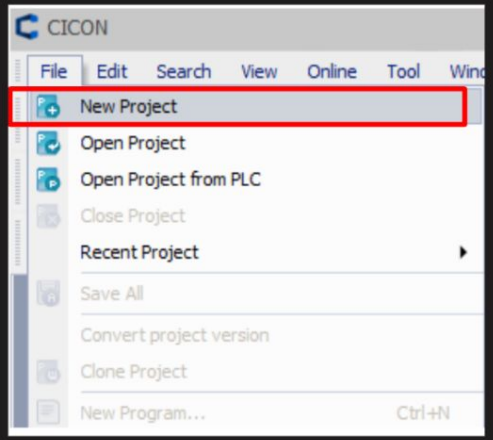
03 REVIEW CIMON PLC DATA STRUCTURE

04 ENERGIZE COILS WITH CONTACTS

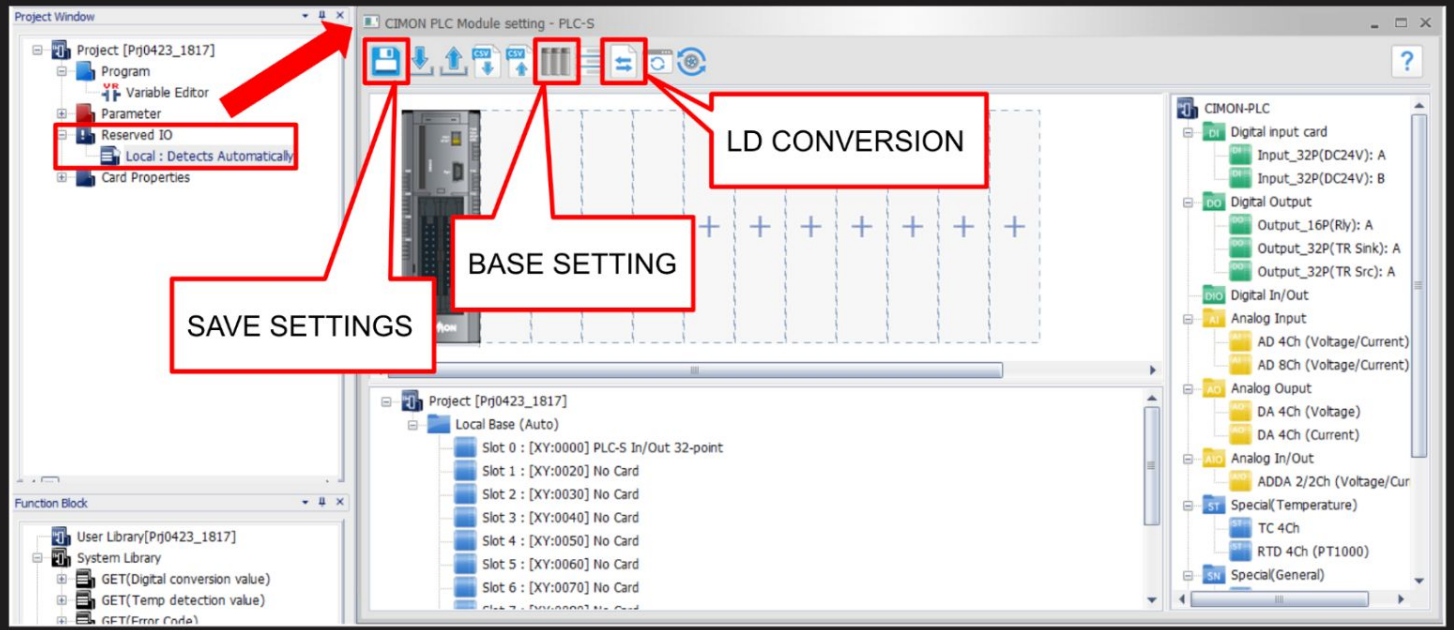
05 COMPARISON AND MOVEMENT INSTRUCTIONS

06 INTERACT WITH A PROJECT USING THE CICON SIMULATOR

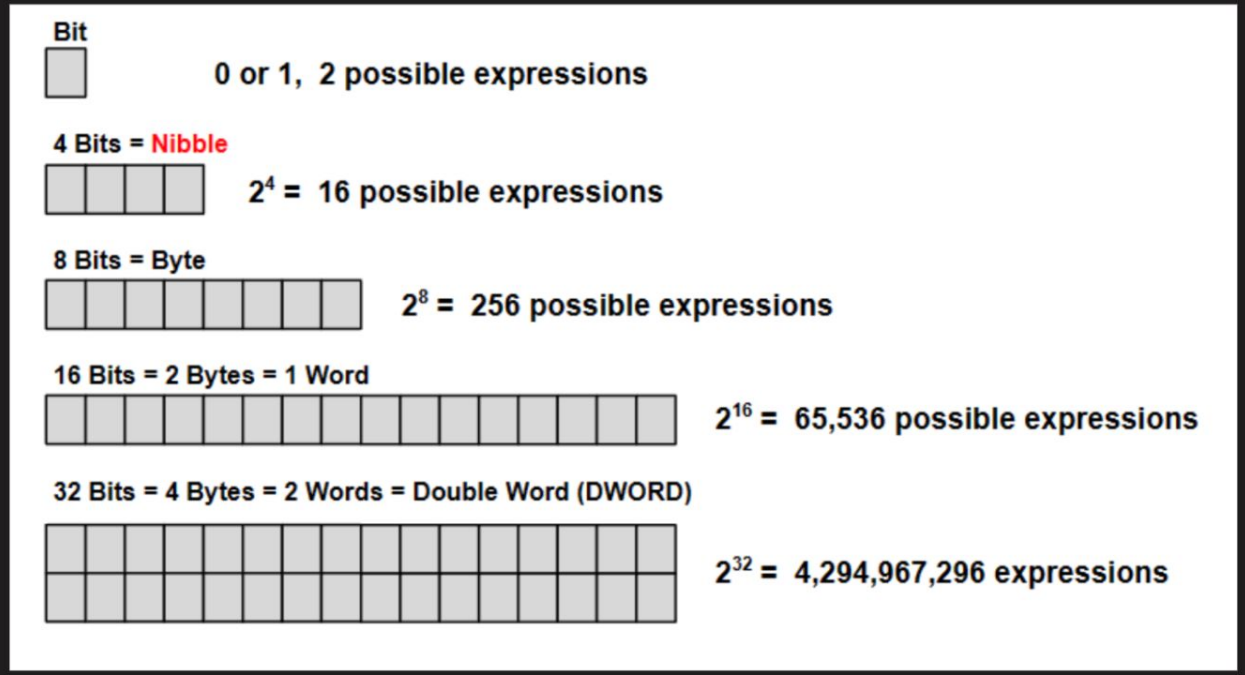
CREATING A NEW CICON PROJECT



CONFIGURING A VIRTUAL CHASSIS



REVIEWING CIMON PLC DATA STRUCTURE



CIMON AUTOMATION

REVIEWING CIMON PLC DATA STRUCTURE

Device	Description	Read/Write
X	Input contact that receives signals from the input module.	R
Y	Output contact that delivers the operation result to the output module.	R/W
M	Auxiliary relay used in the PLC internally.	R/W
K	Similar use as M device. **Supports latching by default. (Non-Volatile Memory)**	R/W
L	Special contact area when used with computer/data link module (i.e. Modbus). Without a link, this area can be used same as M area.	R/W
F	Internal flag relay for the PLC state, time, date or other special contacts.	R
T	Auxiliary relay for Timer instructions.	R
C	Auxiliary relay for Counter instructions.	R
S	Step control relay.	R/W
D	Capable of 16/32-bit data.	R/W
Z	Similar to the D device, but is ideally used with subroutines. **Cannot have an alias or description.**	R/W
R	Index register used to indirectly indicate the address of device memory. CIMON PLC CPU provides 16 index registers. Each register can store offset value in 16-bit.	R/W

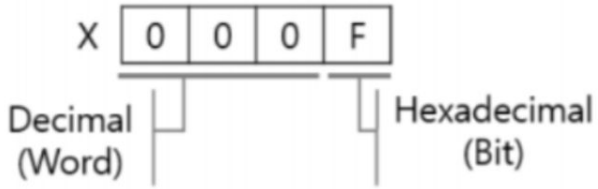
CIMON AUTOMATION

REVIEWING CIMON PLC DATA STRUCTURE

Bit Device Notation

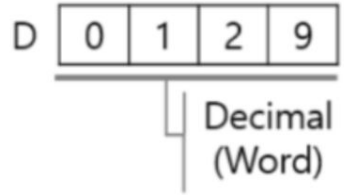
- *Using Bit of Bit Device*

(X, Y, M, K, L, F)

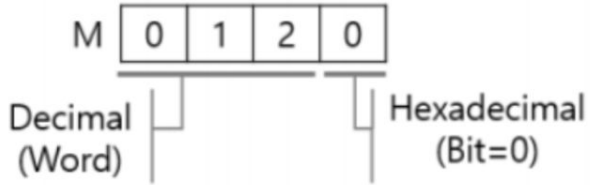


Word Device Notation

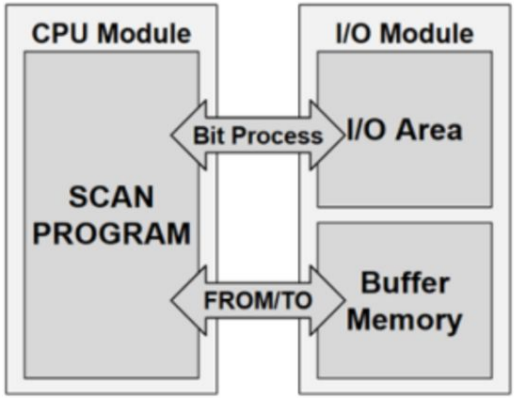
(T, C, D, Z)

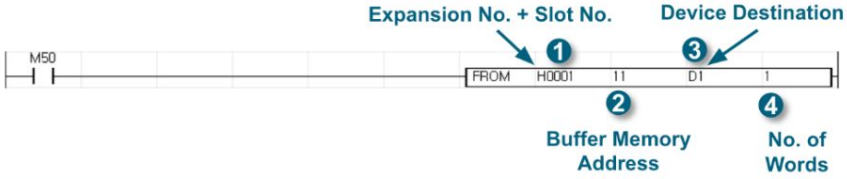


Using Word of Bit Device



REVIEWING CIMON PLC DATA STRUCTURE

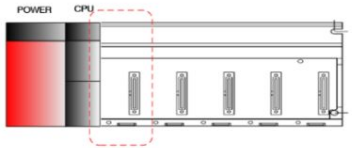




① Expansion No. & Slot No.

	Base No.	Slot No.
H	0A	0B

H + [Base No.] + [Slot No.]
H: Stands for hexadecimal
Base No.: 2 characters in hexadecimal
Slot No.: 2 characters in hexadecimal



② Buffer Memory Address

Address		Description	
Hexa	Deci		
9H	9	Assigning averaging process	R/W
AH	10	Flag indicating A/D-converted	R
BH	11	Digital output value of CH1	R
CH	12	Digital output value of CH2	R
DH	13	Digital output value of CH3	R
EH	14	Digital output value of CH4	R
FH	15	Digital output value of CH5	R
10H	16	Digital output value of CH6	R
11H	17	Digital output value of CH7	R
12H	18	Digital output value of CH8	R
13H	19	Error code	R
14H	20	Set range (CH1 ~ CH4)	R/W
15H	21	Set range (CH5 ~ CH8)	R/W
16H	22	Channel to calibrate offset	R/W

CIMON AUTOMATION

QUESTIONS

1. WHICH REGISTER(S) IS/ARE INTENDED FOR ANALOG USAGE?

2. IS M210 A WORD OR BIT?

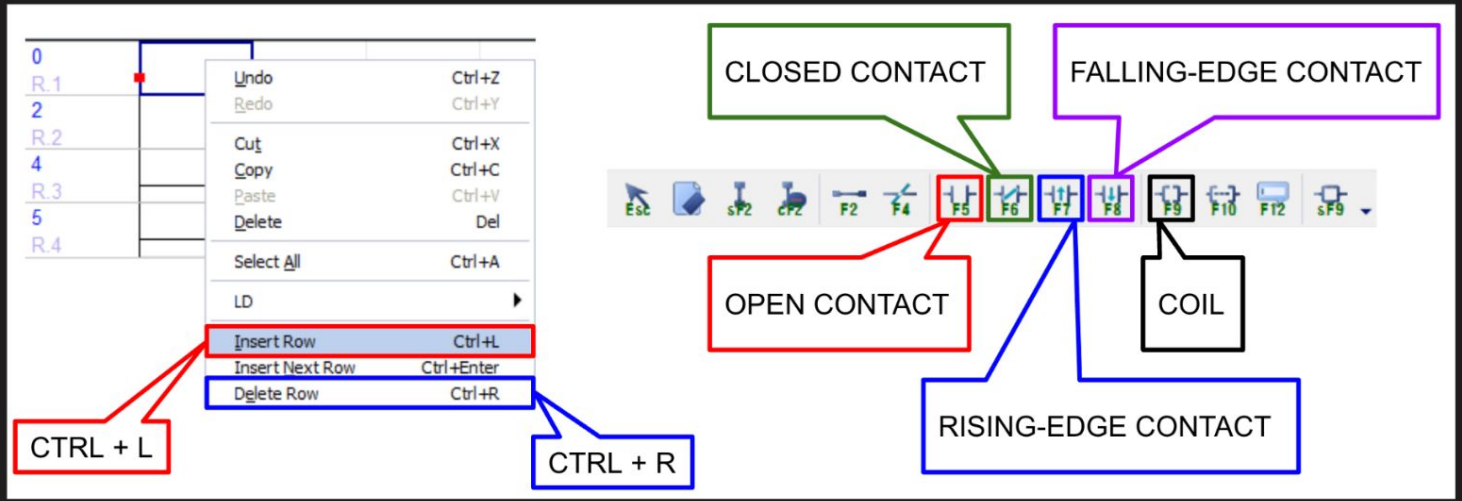
3. WHICH INSTRUCTION EXTRACTS DATA FROM THE BUFFER MEMORY OF AN EXPANSION MODULE?

4. CAN Y1A BE USED IN A WORD INSTRUCTION, SUCH AS ADD?

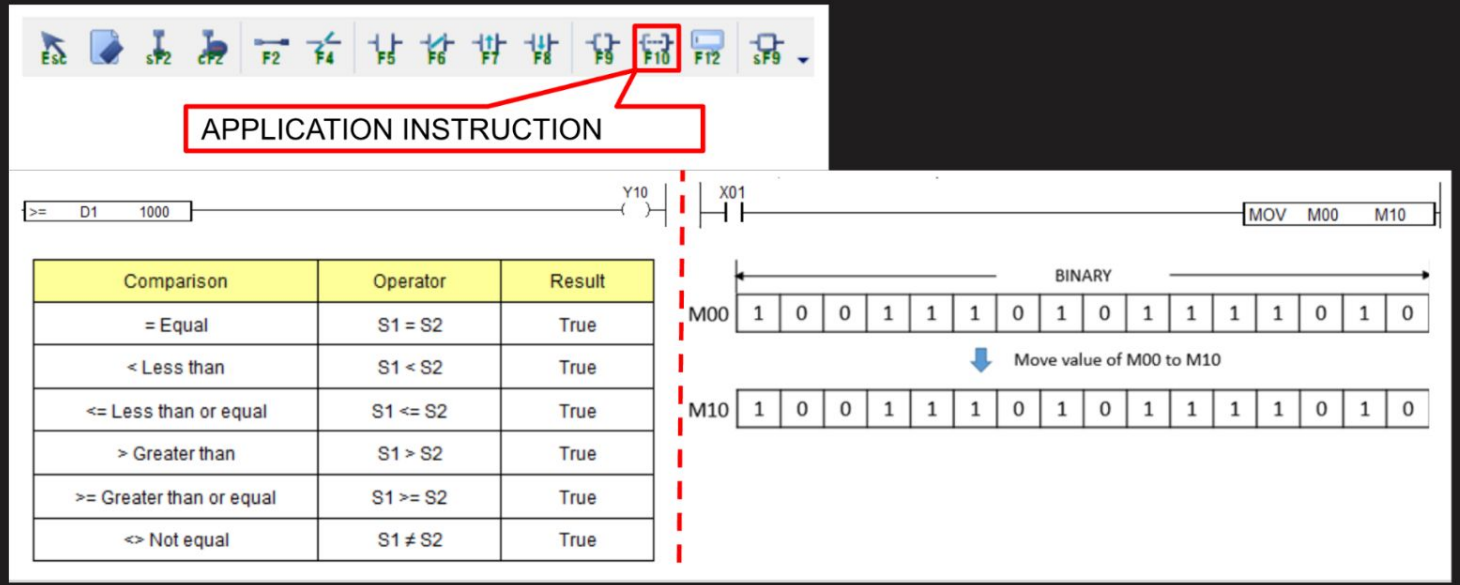
5. WHICH REGISTERS ARE MY PHYSICAL INPUTS AND OUTPUTS?

CIMON AUTOMATION

ENERGIZING COILS WITH CONTACTS

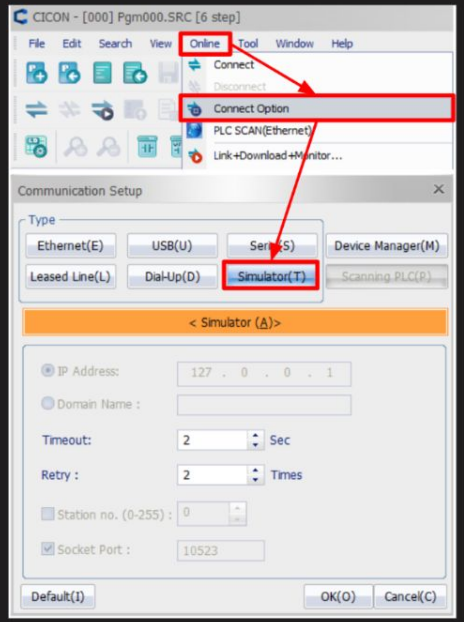


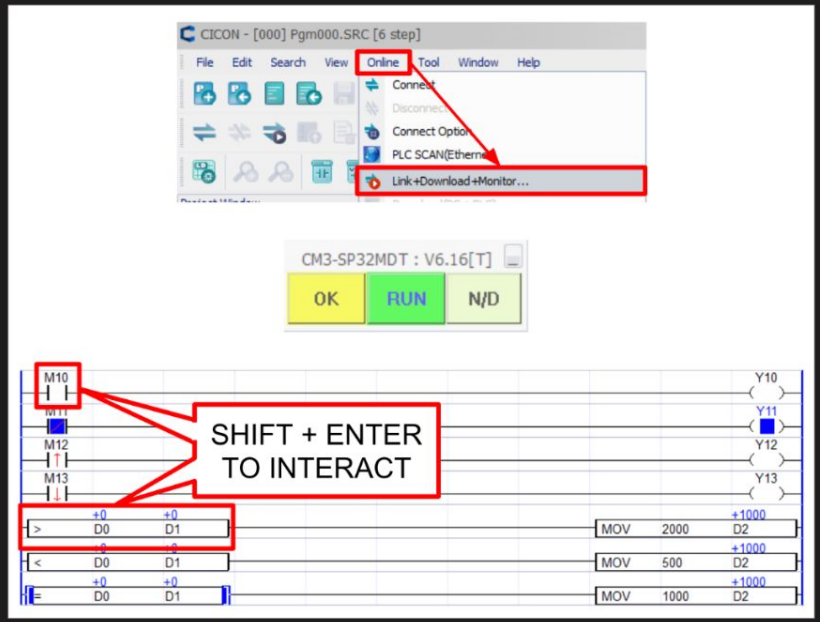
COMPARISON AND MOVEMENT INSTRUCTIONS



Comparison	Operator	Result
= Equal	S1 = S2	True
< Less than	S1 < S2	True
<= Less than or equal	S1 <= S2	True
> Greater than	S1 > S2	True
>= Greater than or equal	S1 >= S2	True
<> Not equal	S1 ≠ S2	True

INTERACTING WITH CICON SIMULATOR





QUESTIONS

1. WHICH HOTKEY ALLOWS FOR EASY TOGGLING OF A CONTACT OR CHANGING A DATA REGISTER'S VALUE?

2. WHY DO Y12 OR Y13 NOT STAY ON CONTINUOUSLY AS OPPOSED TO Y10 OR Y11?

3. WHICH HOTKEY ALLOWS THE USER TO CREATE RUNGS QUICKLY? HOW ABOUT DELETING RUNGS?

4. WHICH BUTTON IS BEST FOR DOWNLOADING A PROJECT TO THE PLC?

CIMON AUTOMATION


THANK YOU
CIMON
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