

\* m-PRO 의 Station No.와 통신 Speed 설정 방법

1. m-PRO I(본 예제에서 사용된 제품)

1) m-PRO I 의 설정항목 21.bd 에서 통신 Speed 설정

- \* 1 : 2,400 bps
- \* 2 : 4,800 bps
- \* 3 : 9,600 bps (본 예제에서 사용된 속도)
- \* 4 : 19,200 bps

2) m-PRO I 의 설정항목 20.Ad 에서 Station No. 설정

\* Station No. 는 기본값으로 1 로 되어 있습니다. 필요한 No. 로 바꾸면 되며,  
본 예제에서는 1 로 설정하여 테스트 하였습니다.

2. m-Pro G

1) m-PRO G 의 설정항목 17.bd 에서 통신 Speed 설정

- \* 1 : 2,400 bps
- \* 2 : 4,800 bps
- \* 3 : 9,600 bps
- \* 4 : 19,200 bps

2) m-PRO G 의 설정항목 22.Ad 에서 Station No. 설정

\* Station No. 는 기본값으로 1 로 되어 있습니다. 필요한 No. 로 바꾸면 되며,  
본 예제에서는 1 로 설정하여 테스트 하였습니다.

3. im-PRO W 또는 im-PRO H

1) im-PRO 의 설정항목 SPdF 에서 통신 Speed 설정

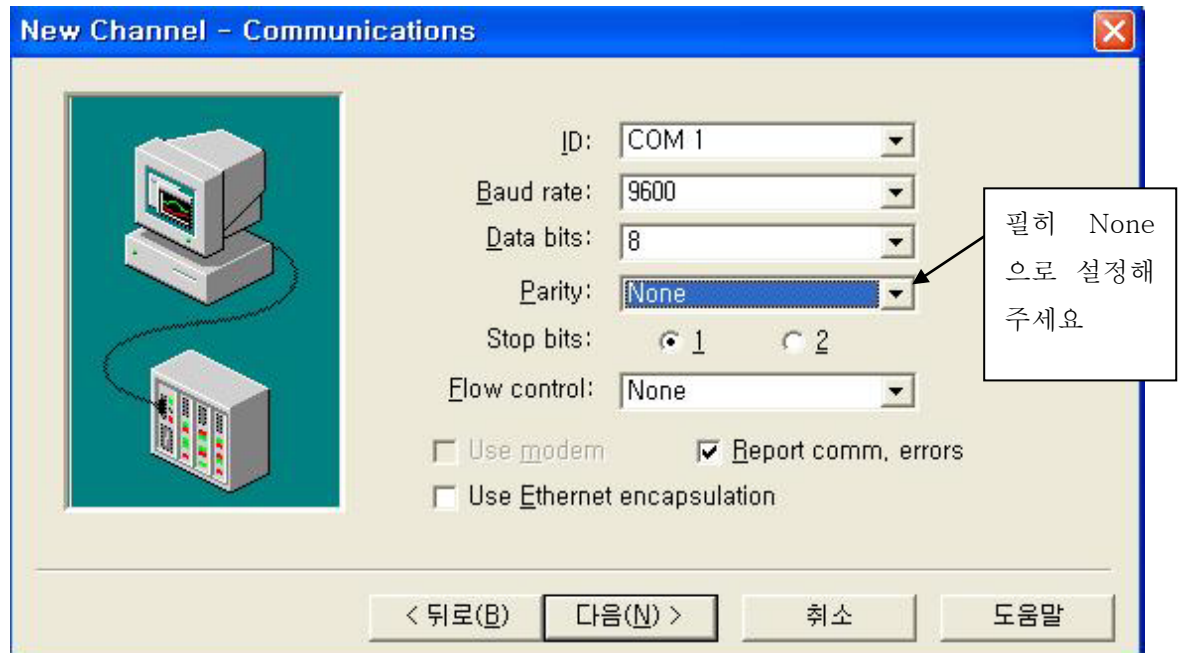
- \* 1 : 2,400 bps
- \* 2 : 4,800 bps
- \* 3 : 9,600 bps
- \* 4 : 19,200 bps

2) im-PRO 의 설정항목 StAn 에서 Station No. 설정

\* Station No. 는 기본값으로 3 로 되어 있습니다. 필요한 No. 로 바꾸면 되며,  
본 예제에서는 3 로 설정하여 테스트 하였습니다.

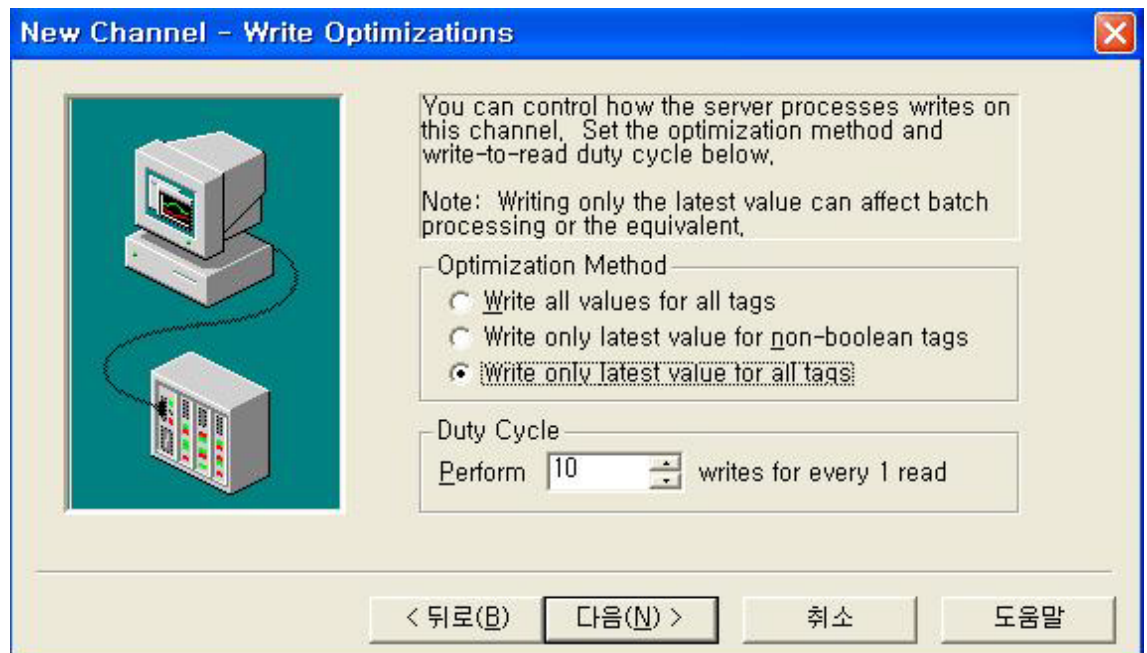


B. 통신 사양을 설정합니다.



The 'New Channel - Communications' dialog box is shown. It features a graphic of a computer and a PLC on the left. On the right, the following settings are visible: ID: COM 1, Baud rate: 9600, Data bits: 8, Parity: None (highlighted with a blue selection bar), Stop bits: 1 (selected), Flow control: None. Below these are checkboxes for 'Use modem' (unchecked), 'Report comm. errors' (checked), and 'Use Ethernet encapsulation' (unchecked). At the bottom are buttons for '< 뒤로(B)', '다음(N) >', '취소', and '도움말'. A callout box with an arrow pointing to the Parity dropdown contains the text: '필히 None 으로 설정해 주세요'.

C. 쓰기 최적화 단계 → 기본값으로 설정



The 'New Channel - Write Optimizations' dialog box is shown. It features a graphic of a computer and a PLC on the left. On the right, there is a text box explaining that the user can control how the server processes writes and set the optimization method and write-to-read duty cycle. Below this is a 'Note' about writing only the latest value. The 'Optimization Method' section has three radio buttons: 'Write all values for all tags' (unchecked), 'Write only latest value for non-boolean tags' (unchecked), and 'Write only latest value for all tags' (checked). The 'Duty Cycle' section has a 'Perform' label, a spinner box set to 10, and the text 'writes for every 1 read'. At the bottom are buttons for '< 뒤로(B)', '다음(N) >', '취소', and '도움말'.

D. 설정 요약 확인한 후 마침을 눌러주세요.

E. 새로운 channel 이 생성된 화면입니다.

Tag Name	Address	Data Type	Scan Rate	Scaling	Description
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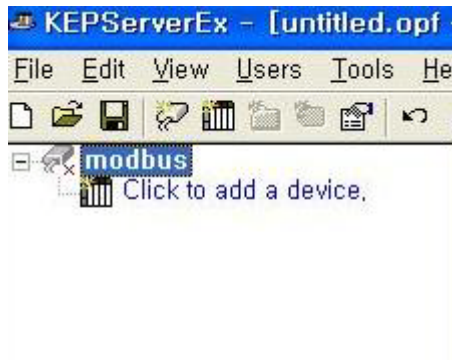
  

Date	Time	User Name	Source	Event
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Micro-DCI device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Modbus Ethernet device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Modbus Plus device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Modbus Unsolicited Serial device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	ODBC Client Driver device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Omron FINS Ethernet device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Siemens S7 MPI device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	SattBus device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Siemens S7-200 device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Siemens TCP/IP Unsolicited Ethernet device driver loaded succ
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Simulator device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	SIXNET UDR device driver loaded successfully.

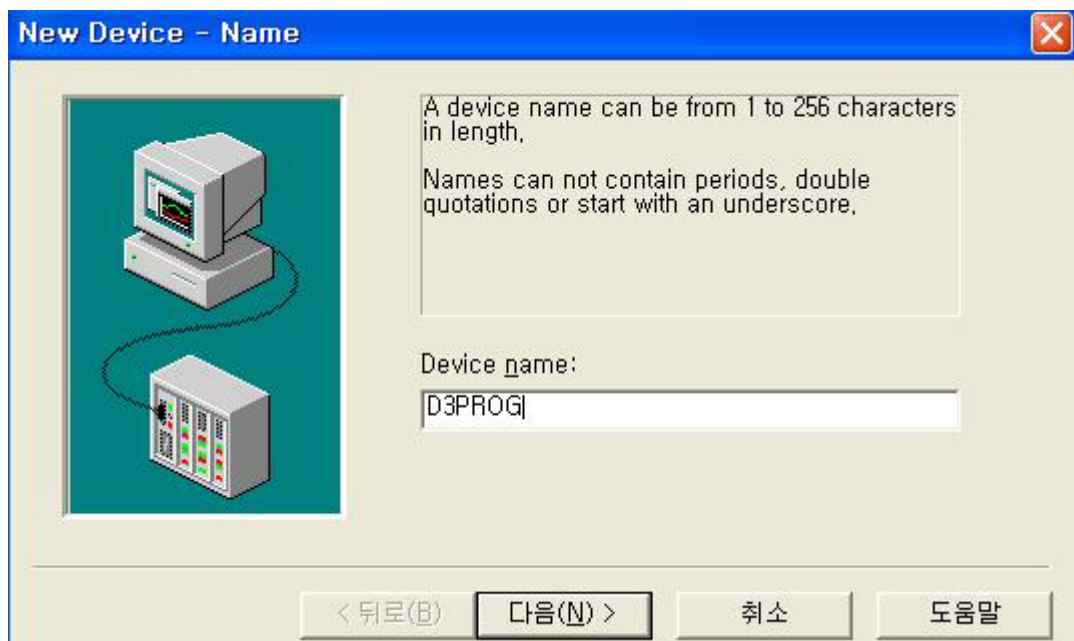
2. MODBUS channel 에서 Device를 생성해야 합니다.

아래 그림의 Click to add a device 를 클릭하면, device 생성 창이 나타납니다.

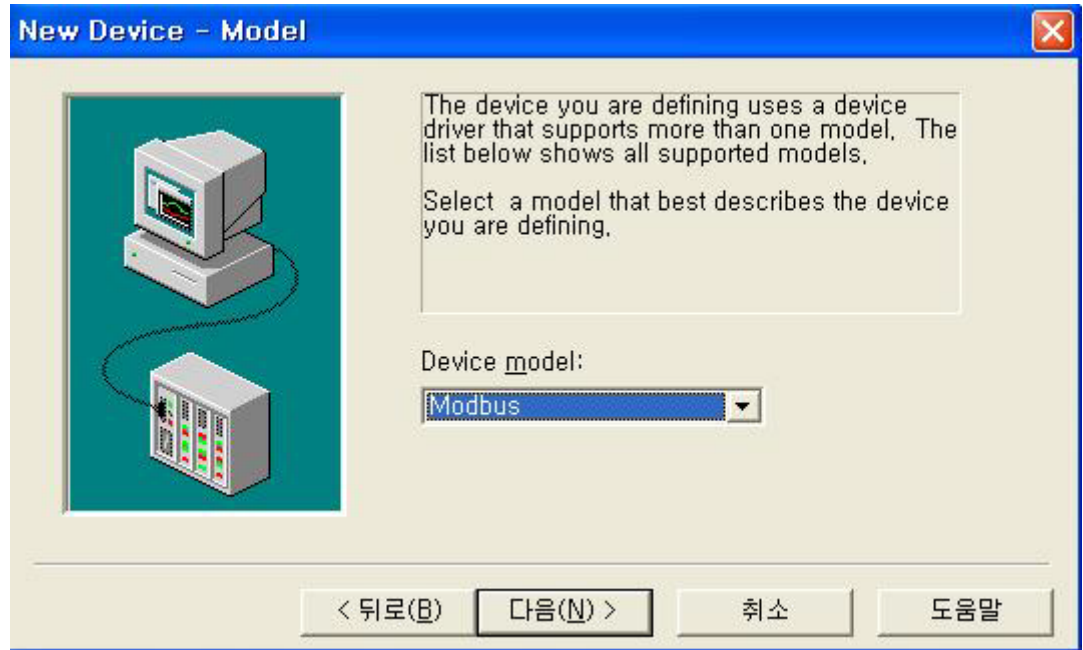
A. Click to add a device



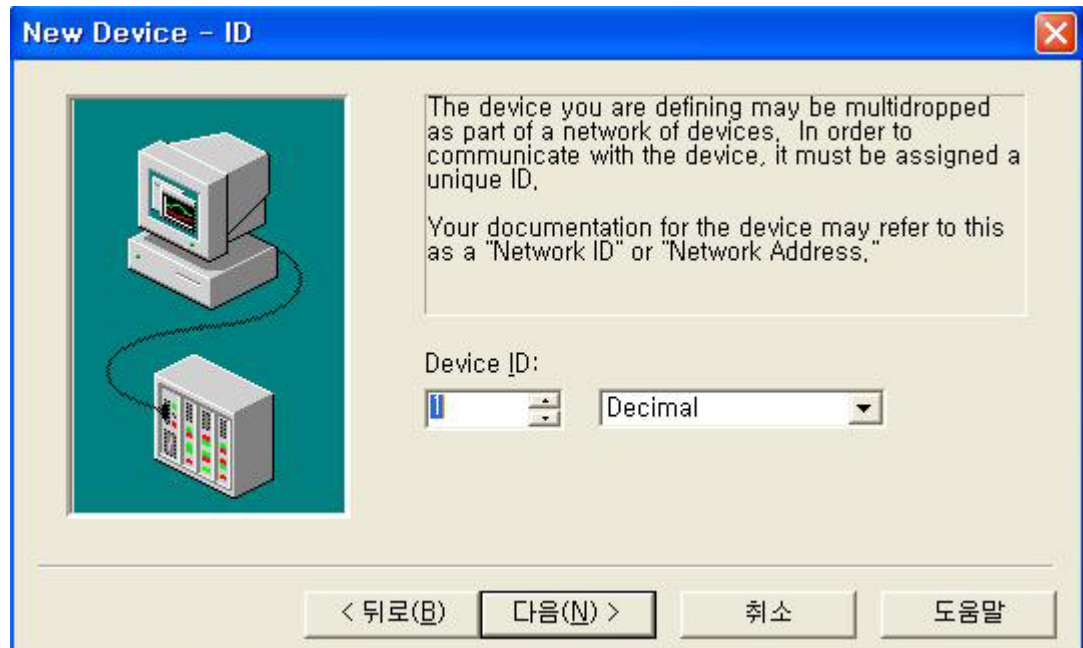
B. New Device → 예) D3PROG



- i. Device model : Modbus

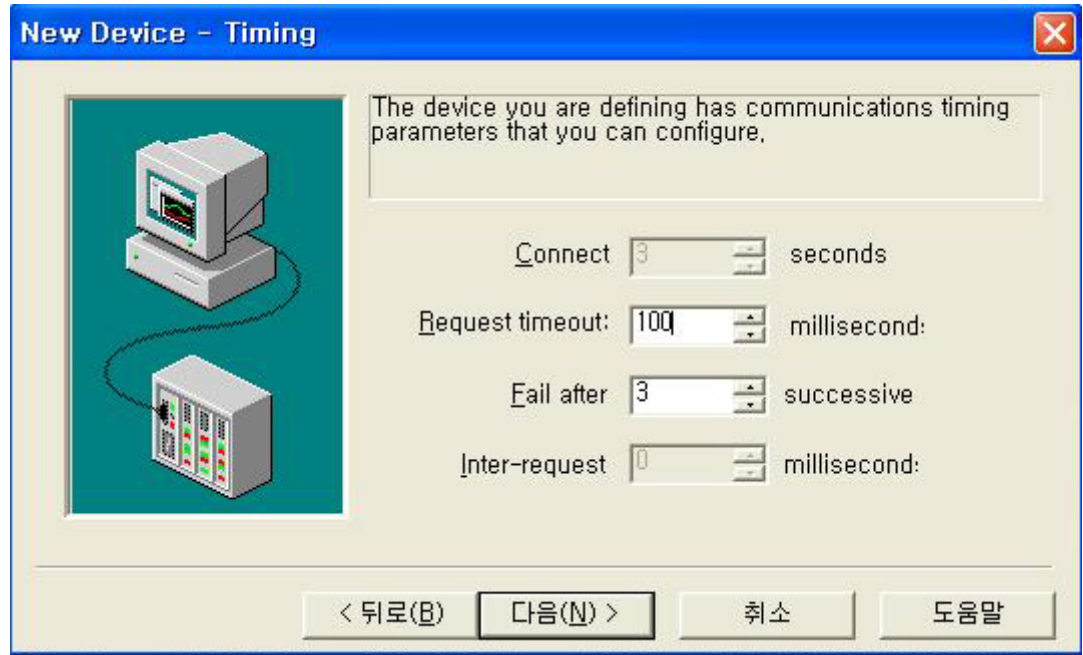


- ii. Select Device ID : 1(station number)    과    Decimal(진수)



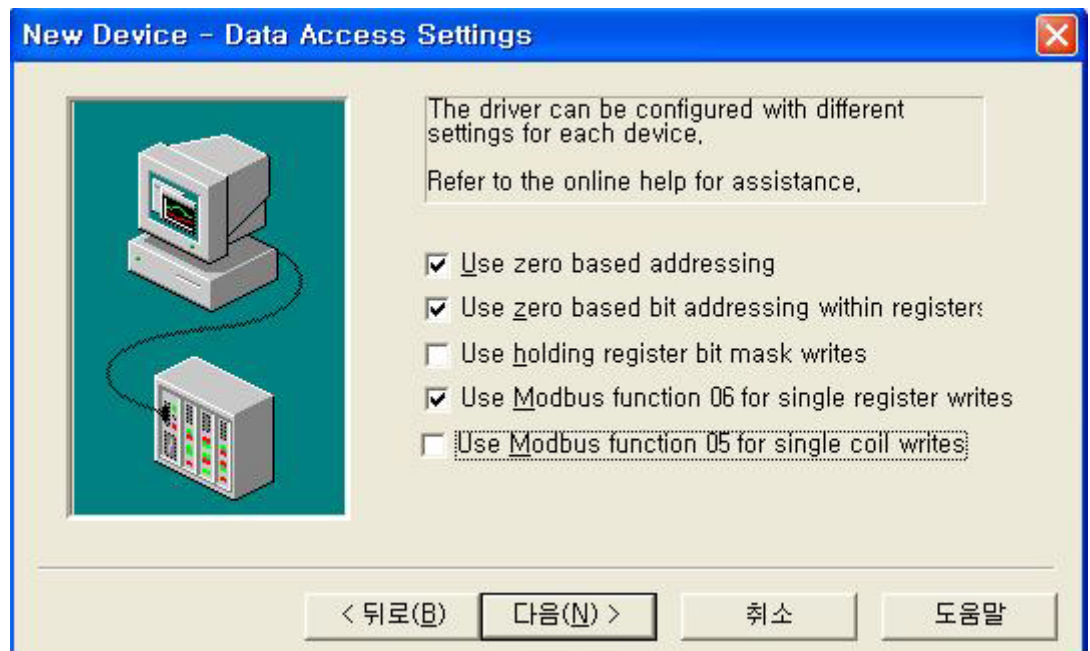


- iii. Timing : 사용환경에 따라서 선택하세요

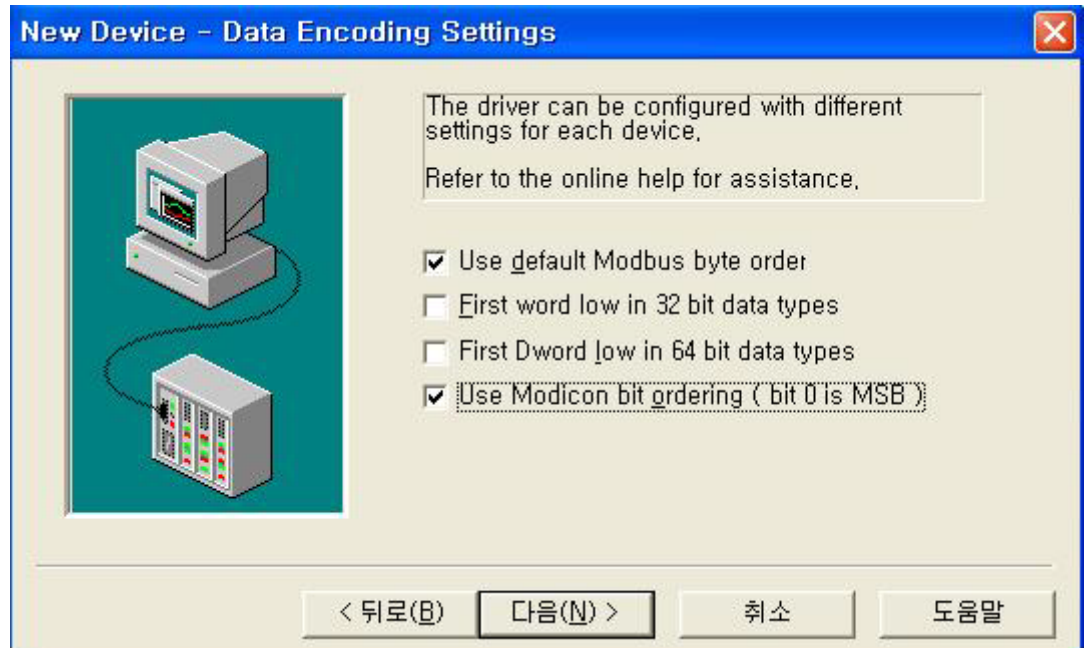


- iv. 다음 창의 'Auto-Demotion' 은 기본값 사용  
v. 'Database creation'도 기본값을 사용하시면됩니다.

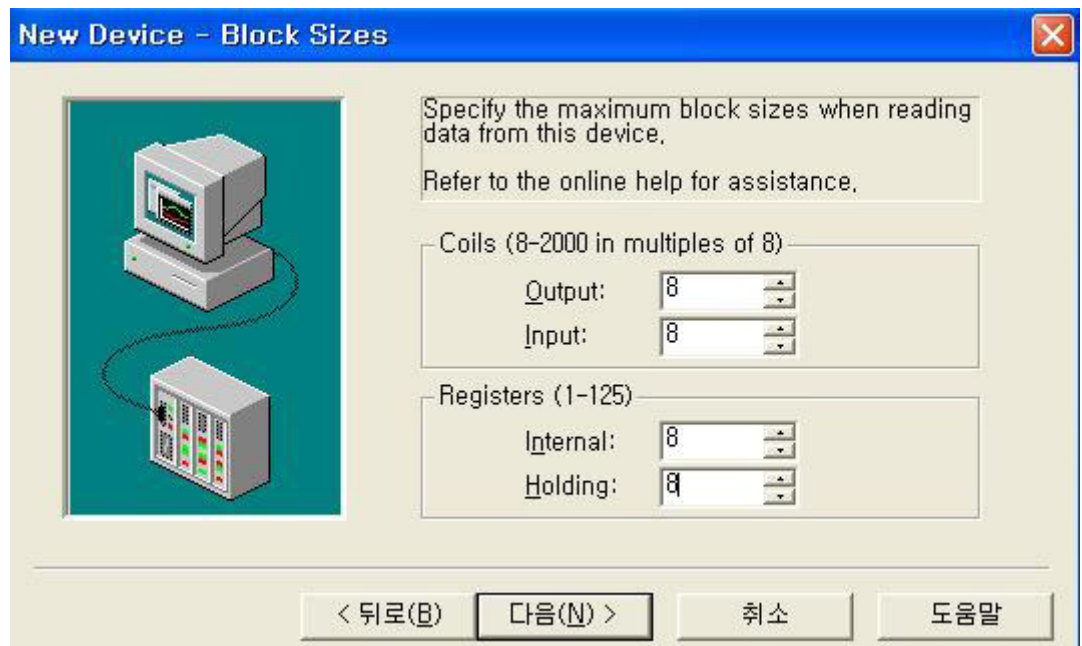
- vi. Data Access Setting



vii. Data Encoding Setting



viii. Block Sizes



ix. 다음 사항 'Variable Import Settings'은 기본값으로 사용



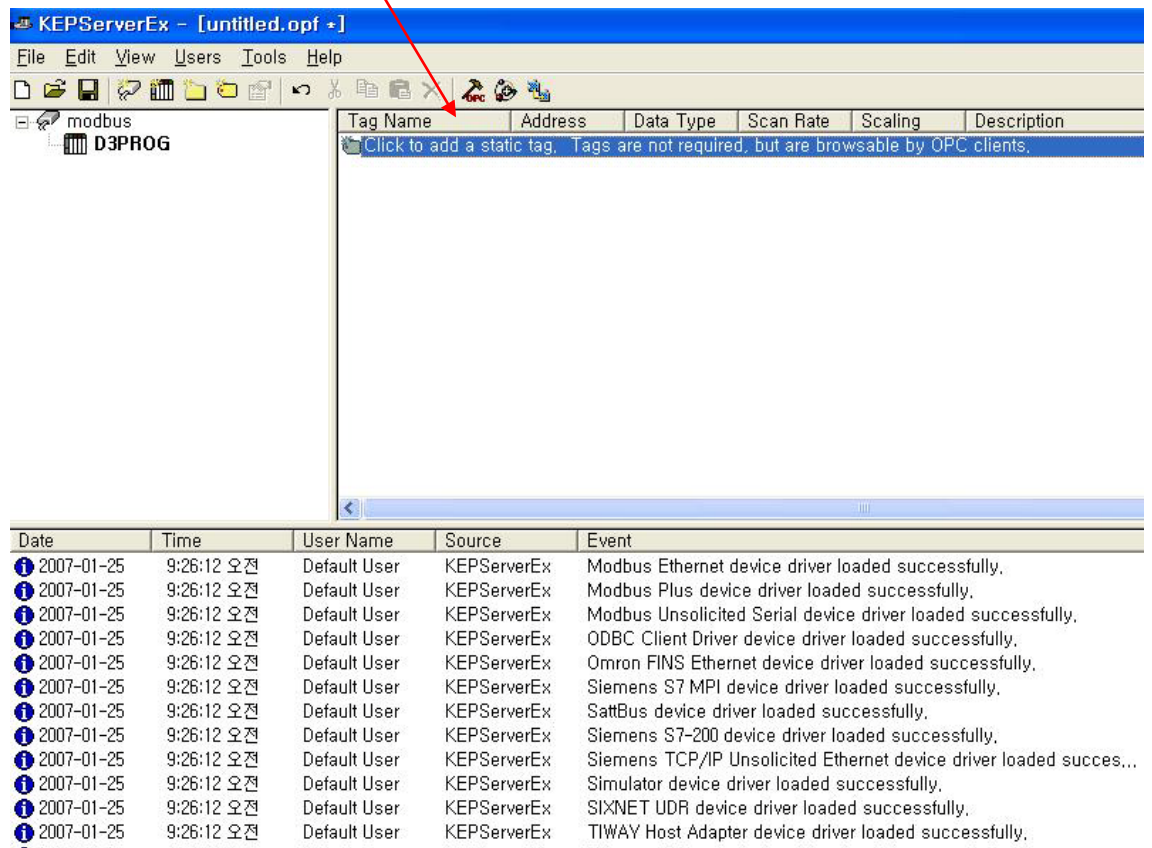
- x. View summary 후 마침을 누르면 다음과 같이 device가 생성됩니다.

The screenshot shows the KEPServerEx application window. The title bar reads 'KEPServerEx - [untitled.opf \*]'. The menu bar includes 'File', 'Edit', 'View', 'Users', 'Tools', and 'Help'. Below the menu is a toolbar with various icons. The main window is divided into two panes. The left pane shows a tree view with 'modbus' expanded, revealing a sub-item 'D3PROG'. The right pane displays a table with columns: 'Tag Name', 'Address', 'Data Type', 'Scan Rate', 'Scaling', and 'Description'. Below this table is a text instruction: 'Click to add a static tag. Tags are not required, but are browsable by OPC clients.' At the bottom of the window is a log window with a table of events.

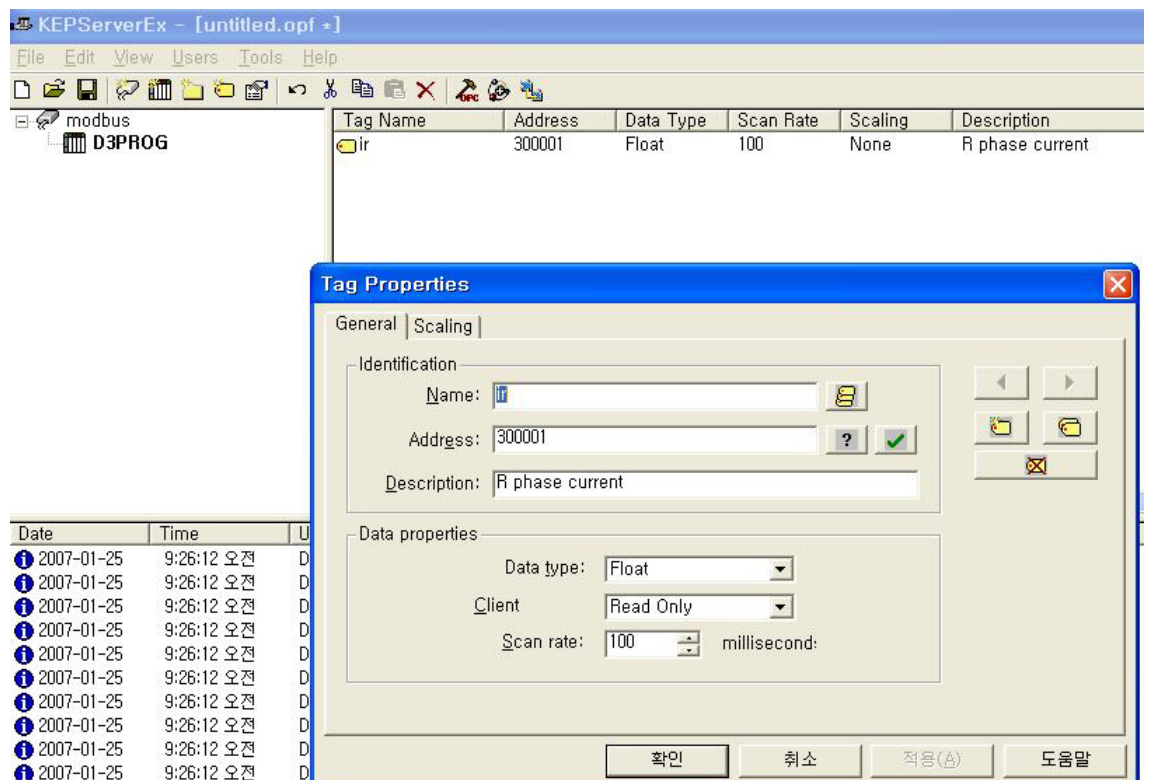
Date	Time	User Name	Source	Event
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Modbus Ethernet device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Modbus Plus device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Modbus Unsolicited Serial device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	ODBC Client Driver device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Omron FINS Ethernet device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Siemens S7 MPI device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	SattBus device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Siemens S7-200 device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Siemens TCP/IP Unsolicited Ethernet device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	Simulator device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	SIXNET UDR device driver loaded successfully.
2007-01-25	9:26:12 오전	Default User	KEPServerEx	TIWAY Host Adapter device driver loaded successfully.

### 3. Make tags of the D3PROG

#### A. Click to add a static tag ...



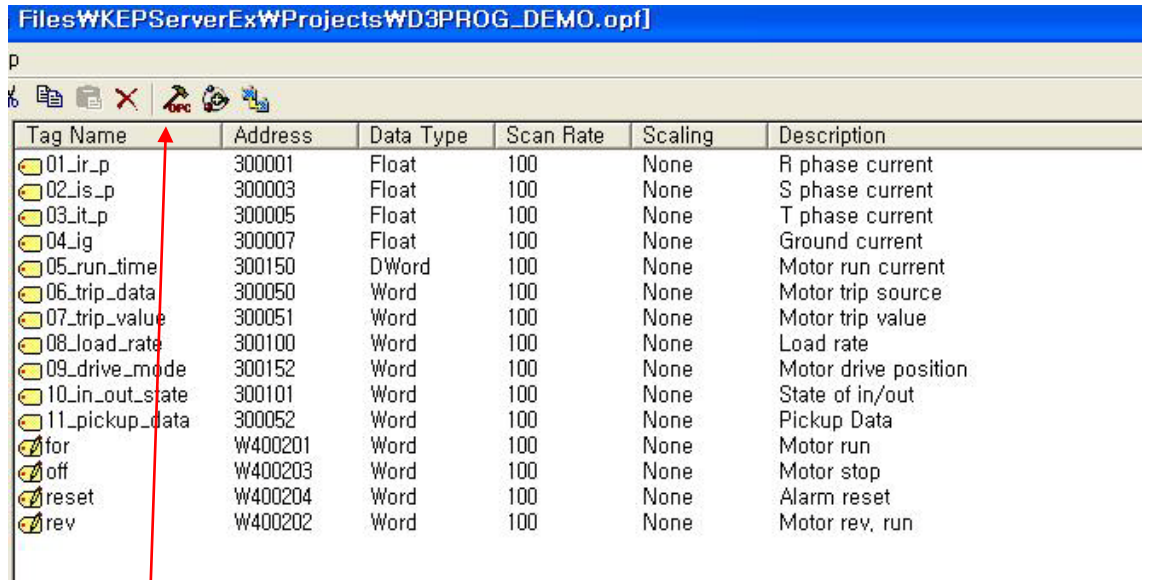
#### B. 필요한 Tag들을 생성합니다. → ex) R상, S상, T상 등.



C. View All Tags(생성된 Tag들 → 읽어들이는 데이터와 기동용 데이터들)

Files\WKEPServerEx\WProjects\WD3PROG\_DEMO.opf]

P



Tag Name	Address	Data Type	Scan Rate	Scaling	Description
01_lr_p	300001	Float	100	None	R phase current
02_ls_p	300003	Float	100	None	S phase current
03_lt_p	300005	Float	100	None	T phase current
04_lg	300007	Float	100	None	Ground current
05_run_time	300150	DWord	100	None	Motor run current
06_trip_data	300050	Word	100	None	Motor trip source
07_trip_value	300051	Word	100	None	Motor trip value
08_load_rate	300100	Word	100	None	Load rate
09_drive_mode	300152	Word	100	None	Motor drive position
10_in_out_state	300101	Word	100	None	State of in/out
11_pickup_data	300052	Word	100	None	Pickup Data
for	W400201	Word	100	None	Motor run
off	W400203	Word	100	None	Motor stop
reset	W400204	Word	100	None	Alarm reset
rev	W400202	Word	100	None	Motor rev. run

주) 40000번지대와 30000번지대 주소들을 입력하면 자동으로 400000번지대와 300000번지대로 바뀝니다. 차이 없습니다.

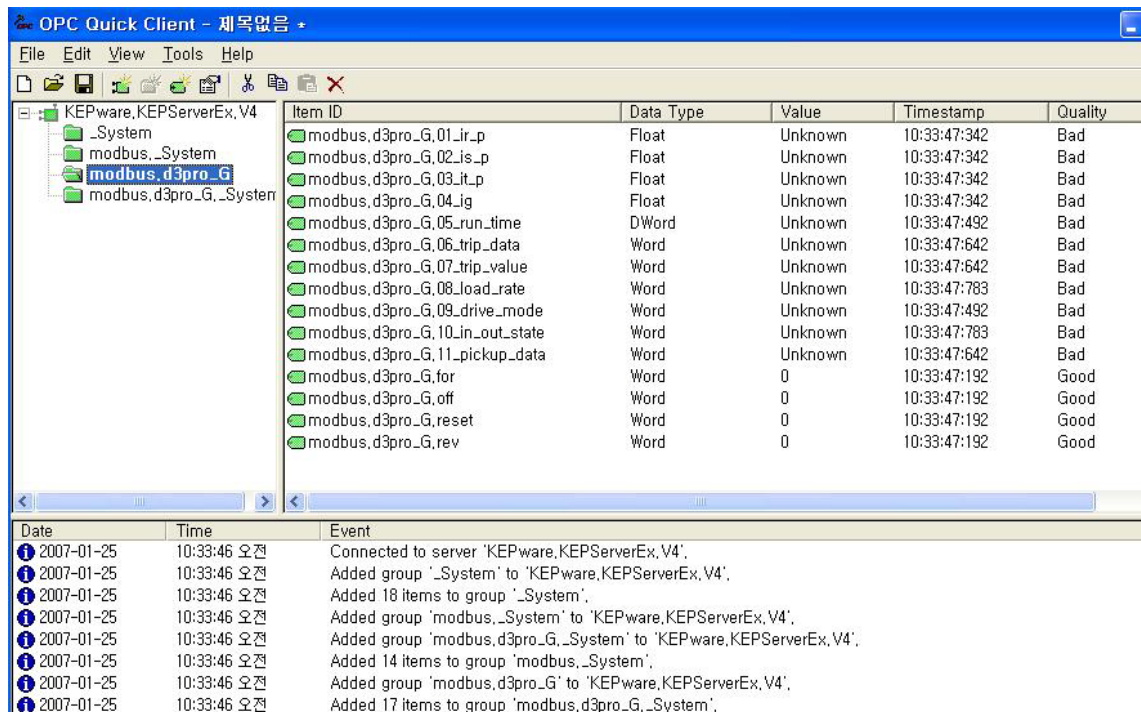
4. Finished

Simulation

1. Click to OPC icon → OPC Quick Client 창이 나타나고 통신이 접속되면 Value 라인에 데이터가 들어오게 됩니다.

OPC Quick Client - 제목없음 \*

File Edit View Tools Help



Item ID	Data Type	Value	Timestamp	Quality
modbus, d3pro_G, 01_lr_p	Float	Unknown	10:33:47:342	Bad
modbus, d3pro_G, 02_ls_p	Float	Unknown	10:33:47:342	Bad
modbus, d3pro_G, 03_lt_p	Float	Unknown	10:33:47:342	Bad
modbus, d3pro_G, 04_lg	Float	Unknown	10:33:47:342	Bad
modbus, d3pro_G, 05_run_time	DWord	Unknown	10:33:47:492	Bad
modbus, d3pro_G, 06_trip_data	Word	Unknown	10:33:47:642	Bad
modbus, d3pro_G, 07_trip_value	Word	Unknown	10:33:47:642	Bad
modbus, d3pro_G, 08_load_rate	Word	Unknown	10:33:47:783	Bad
modbus, d3pro_G, 09_drive_mode	Word	Unknown	10:33:47:492	Bad
modbus, d3pro_G, 10_in_out_state	Word	Unknown	10:33:47:783	Bad
modbus, d3pro_G, 11_pickup_data	Word	Unknown	10:33:47:642	Bad
modbus, d3pro_G, for	Word	0	10:33:47:192	Good
modbus, d3pro_G, off	Word	0	10:33:47:192	Good
modbus, d3pro_G, reset	Word	0	10:33:47:192	Good
modbus, d3pro_G, rev	Word	0	10:33:47:192	Good

Date	Time	Event
2007-01-25	10:33:46 오전	Connected to server 'KEPware,KEPServerEx,V4'.
2007-01-25	10:33:46 오전	Added group '_System' to 'KEPware,KEPServerEx,V4'.
2007-01-25	10:33:46 오전	Added 18 items to group '_System'.
2007-01-25	10:33:46 오전	Added group 'modbus,_System' to 'KEPware,KEPServerEx,V4'.
2007-01-25	10:33:46 오전	Added group 'modbus,d3pro_G,_System' to 'KEPware,KEPServerEx,V4'.
2007-01-25	10:33:46 오전	Added 14 items to group 'modbus,_System'.
2007-01-25	10:33:46 오전	Added group 'modbus,d3pro_G' to 'KEPware,KEPServerEx,V4'.
2007-01-25	10:33:46 오전	Added 17 items to group 'modbus,d3pro_G,_System'.

## 2. 기동 명령 입력하는 방법

Item ID	Data Type	Value	Timestamp	Quality
modbus,d3pro_G,01_ir_p	Float	Unknown	10:33:47:342	Bad
modbus,d3pro_G,02_is_p	Float	Unknown	10:33:47:342	Bad
modbus,d3pro_G,03_it_p	Float	Unknown	10:33:47:342	Bad
modbus,d3pro_G,04_lig	Float	Unknown	10:33:47:342	Bad
modbus,d3pro_G,05_run_time	DWord	Unknown	10:33:47:492	Bad
modbus,d3pro_G,06_trip_data	Word	Unknown	10:33:47:642	Bad
modbus,d3pro_G,07_trip_value	Word	Unknown	10:33:47:642	Bad
modbus,d3pro_G,08_load_rate	Word	Unknown	10:33:47:783	Bad
modbus,d3pro_G,09_drive_mode	Word	Unknown	10:33:47:492	Bad
modbus,d3pro_G,10_in_out_state	Word	Unknown	10:33:47:783	Bad
modbus,d3pro_G,11_pickup_data	Word	Unknown	10:33:47:642	Bad
modbus,d3pro_G,for	Word	0	10:33:47:192	Good
modbus,d3pro_G,off	Word	0	10:33:47:192	Good
modbus,d3pro_G,reset	Word	0	10:33:47:192	Good
modbus,d3pro_G,rev	Word	0	10:33:47:192	Good

Event	
Connected to server 'KEPware,KEPServ	
Added group '_System' to 'KEPware,KE	
Added 18 items to group '_System',	
Added group 'modbus,_System' to 'KEP	
Added group 'modbus,d3pro_G,_System	
Added 14 items to group 'modbus,_Syst	
Added group 'modbus,d3pro_G' to 'KEP	
Added 17 items to group 'modbus,d3pro	

예) 정기동 명령 넣기 → 정기동 Tag에서 마우스오른쪽 클릭하여 팝업 메뉴에서 Synchronous Write... 를 클릭하면 다음 창이 뜹니다.

A. Click to Synchronous Write...

→ write value 입력란에 A35C 16진수값을 10진수로 변환한 값 41820을 입력하고 Apply 를 클릭하면 기동 명령이 내려지고, 정지명령은 같은 방법으로 정지 Tag 에서 42300값을 입력 하면 정지합니다.

B. Input value of run order : A35C (h) → 41820 (dec)

Item ID	Current Value	Write Value
modbus,d3pro_G,for	0	41820

Finished.

Thank you