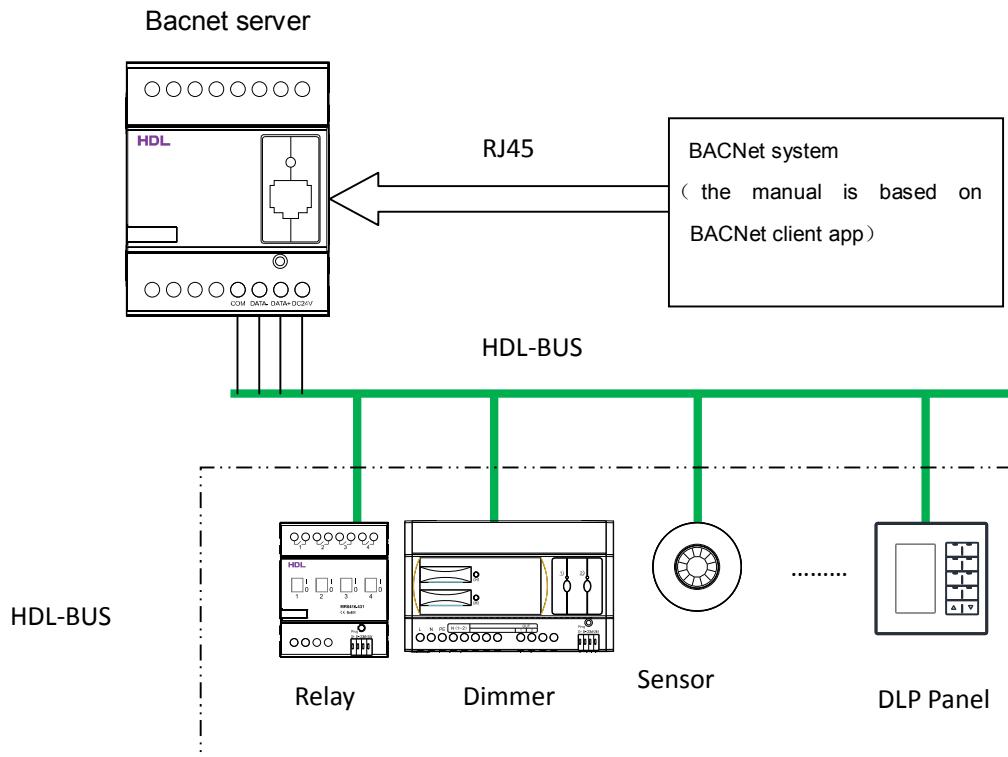


1. Introduction

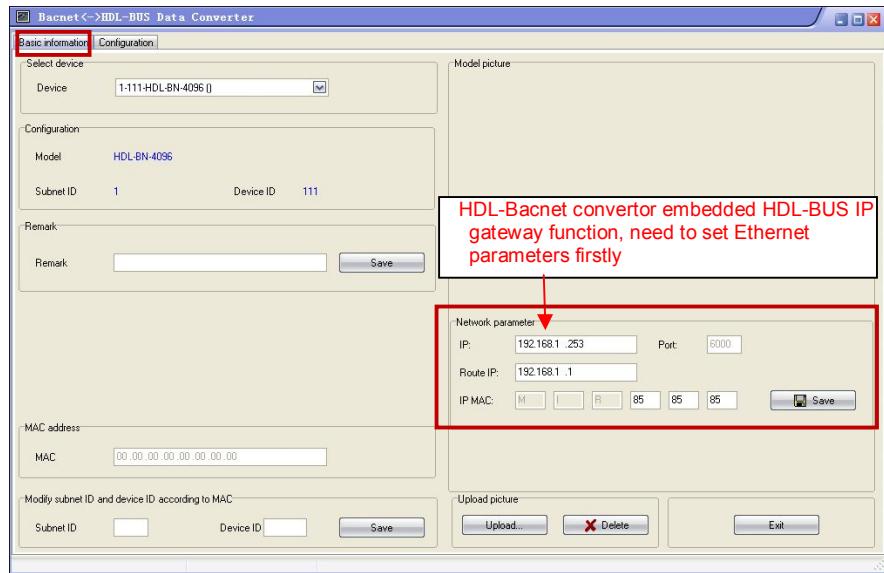
HDL-BN - 4096 Bacnet server , DIN-Rail Mount, Bus and Ethernet enabled, build in the BacNet protocol to allow BA and BMS system to monitor and control HDL system via BacNet protocol, like lighting, HVAC, Curtain, floor heating ,and so on.



2. HDL-Bacnet module configuration instruction

HDL-BUS system devices should be setup inside HDL-BUS configuration software when controlled by Bacnet client. Open HDL-BUS configuration software, search and set parameters of the HDL-Bacnet module.

2.1 Basic information setting



Attention: the IP address of Ethernet parameters should be in the same Ethernet segment with Bacnet client.

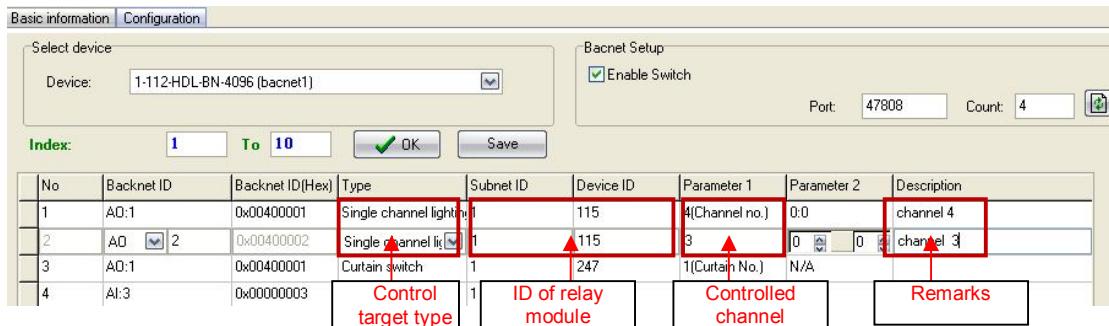
2.2 Parameters setting

No	Bacnet ID	Bacnet ID(Hex)	Type	Subnet ID	Device ID	Parameter 1	Parameter 2	Description
1	AI.1	0x00000001	single channel I/O	1	115	4(Channel no.)	0.0	1区
2	AI.2	0x00000002	scene switch	1	115	1(Area no.)	N/A	curtain
3	AO.1	0x00400001	Curtain switch	1	247	1(Curtain No.)	N/A	
4	AI.0	0x00000000	invalid switch	0	0	0	N/A	
5	AI.0	0x00000000	invalid switch	0	0	0	N/A	
6	AI.0	0x00000000	invalid switch	0	~	0	N/A	
7	(1)	(2)	(3)	0	(4)	(5)		
8				0	~			
9	AI.0	0x00000000	invalid switch	0	0	0	N/A	
10	AI.0	0x00000000	invalid switch	0	0	0	N/A	

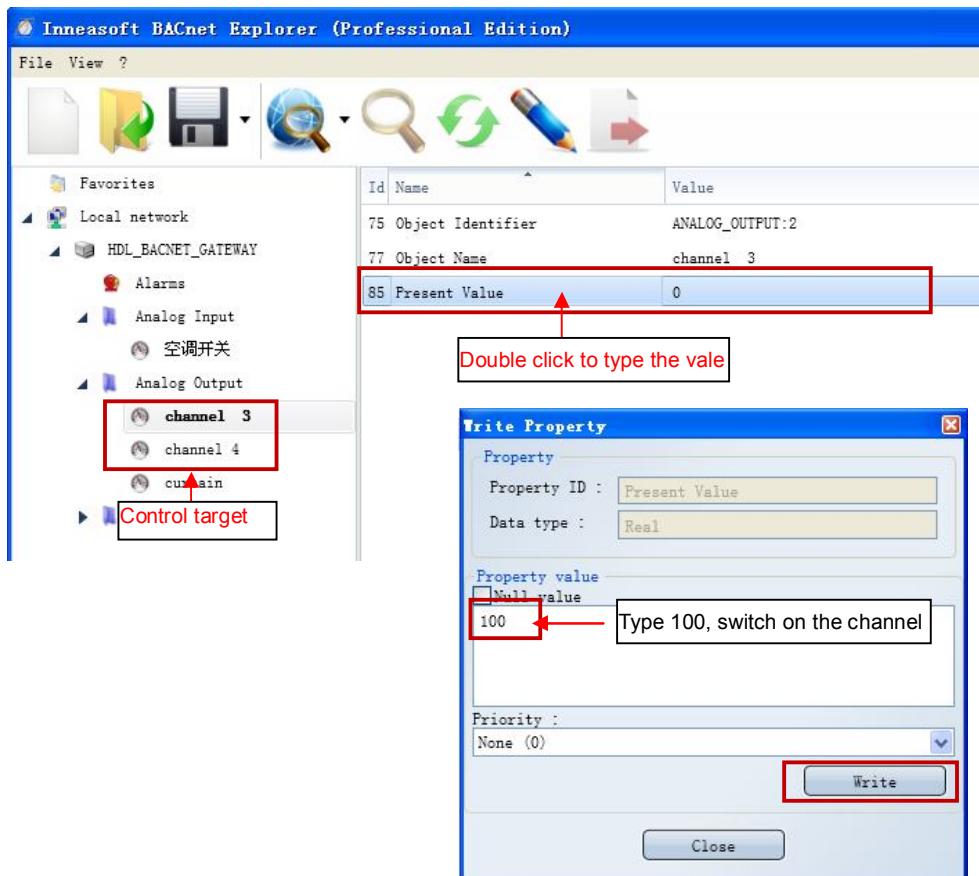
- (1) Bacnet ID includes different types: AI, AO, AV, BI, BO, BV, MI, MO, MV, other, not much differences between different types, but for the convenience of management by client. The value of ID is control point, it is user-defined, cannot be duplicate.
- (2) The Hex value is auto generated according Bacnet ID type and ID value
- (3) Support type of control.
- (4) Subnet ID and Device ID are HDL-BUS device's ID.
- (5) Support command up to now, please refer to below tab addendum.

3. Example setting

Take example of control the third ch of relay module
parameters setting in HDL-BUS configuration software :



Corresponding Setting in Bacnet client:



Type 0, switch off the channel.

4. BACnet Objects:

- AI : Analog Input
- AO : Analog Output
- AV : Analog Value , used to define start-stop commands of devices
- BI : Digital Input (Binary Input)
- BO : Digital Output (Binary Output)
- BV : Digital Value (Binary Value) , used to define start-stop commands of devices
- MI: MutilStats Input
- MO: MutilStats Output
- MV: MutilStats Value

5. Addendum: supported parameter type and parameter settings

Configuration tab			BACnet control parameters
HDL control type	Parameter 1	Parameter 2	BACNET WP Present Value definition and validation scope
0 invalid switch	xxx	xxx	invalid
1 Scene control	Device Area No.	N/A	Area Scene No. "0" means switch off Scene
2 Sequence control	Device Area No.	N/A	Area Sequence No.
3 universal switch	Switch No.	N/A	Switch status: 1: on, 0: off
4 single channel lighting	Device channel No.	adjustment time	Intensity value of ch: 0—100 0: off, 100: on
5 time switch	Channel No.	N/A	Switch status: 1: on, 0: off
6 curtain switch	Curtain No.	N/A	Curtain switch status: 0: stop, 1: open, 2: close
7 GPRS control	Command No.	N/A	Command Status: 0: invalid, 1: SMS, 2: remote
8 Panel control	1 IR Receiving enabling	N/A	1: enable 0: disable
	2 Panel locking	N/A	1: lock 0: unlock
	3 AC switch	N/A	1: on 0: off
	4 cooling temperature of AC	N/A	temperature value setting scope: 0—30 degree Celsius degrees Fahrenheit 32—86
	5 Fan speed of AC	N/A	0: Auto, 1: high, 2: Medium 3: low

	6 AC mode	N/A	0: cooling, 1: heating 2: Ventilaiton, 3: Auto, 4: dehumidification.
	7 Heating temperature of AC	N/A	temperature value setting scope: 0—30 degree Celsius degrees Fahrenheit 32—86
	8 Auto temperature of AC	N/A	temperature value setting scope: 0—30 degree Celsius degrees Fahrenheit 32—86
	9 increase temperature	N/A	Temperature increasing Value :(1-5°C/°F)
	10 decrease temperature	N/A	Temperature decreasing Value :(1-5°C/°F)
	11 Backlight switch	N/A	1: on 0: off
	12 AC locking	N/A	1:lock 0:unlock
	13 Backlight intensity	N/A	Backlight intensity value (0-100%)
	14 status indicator intensity	N/A	Status indicator intensity value (0-100%)
	15 button shielding of panel	Button No.	0: shielded, 1: unshielded
	16 shield page	Page No.	0: shielded, 1: unshielded
	17 control button state	Button No.	<i>disable</i>
	18 control button	Button No.	<i>disable</i>
	19dehumidification temperature of AC	N/A	temperature value setting scope: 0—30 degree Celsius degrees Fahrenheit 32—86
	20 heating switch	N/A	0: off, 1: on
	21 Heating mode	N/A	Mode: (5: time,4: leaving mode, 3: night, 2: daytime,1: normal)
	22 increase heating temperature	N/A	Temperature increasing Value :(1-5°C/°F)
	23 decrease heating temperature	N/A	Temperature decreasing Value :(1-5°C/°F)
8 panel control	24 setting page locking	N/A	1: lock 0: unlock
9 broadcast scene	All areas (255)	N/A	Scene No.: 0—12
10 broadcast channel	All Channel (255)	N/A	Intensity of light ch: 0—100

11 Security module	Security Area (1—8)	N/A	Security modes(1-6): 01: Vacation, 02: leaving, 03: night, 04: night party, 05: daytime, 06: disalarm
12 universal control	Control value	Control value	
13 dry contract	Dry contract NO.	N/A	The state of dry contract
14 Temperature read	Channel NO.	N/A	-20-60°C (1B)