BACnet/IP Gateways

FAQ for GW-5492 and GW-5493

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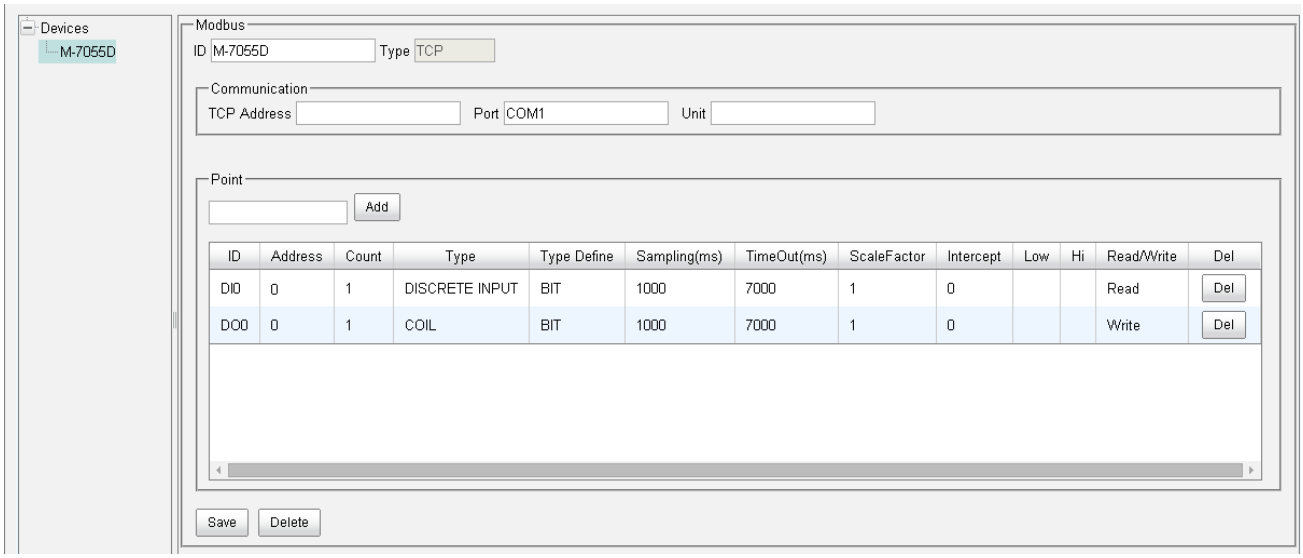
1. How to manipulate GW-549x via ICDT BACnet Pioneer?

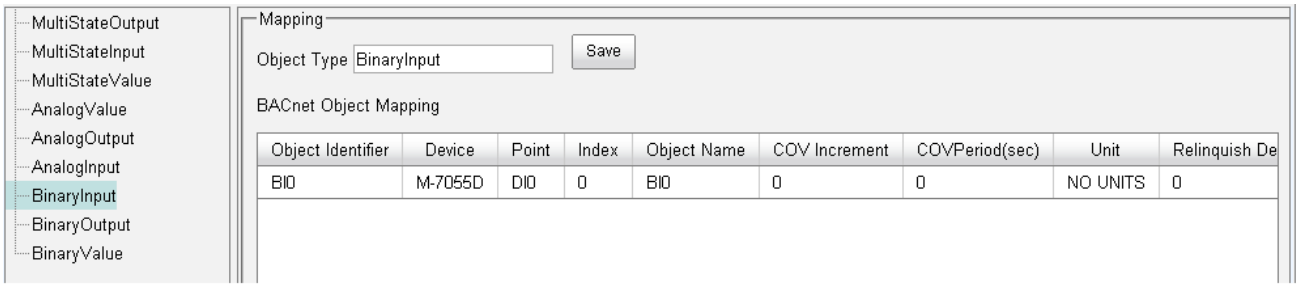
ICDT BACnet Pioneer is a free BACnet software and developed by ICDT Tech. Co. Ltd. The following example is how to switch on the DO[0] and read DI[0] back on the ICPDAS M-7055D, a Modbus/RTU Slave, connected to GW-5492 via ICDT BACnet Pioneer, and you can test GW-5493 in the similar way.

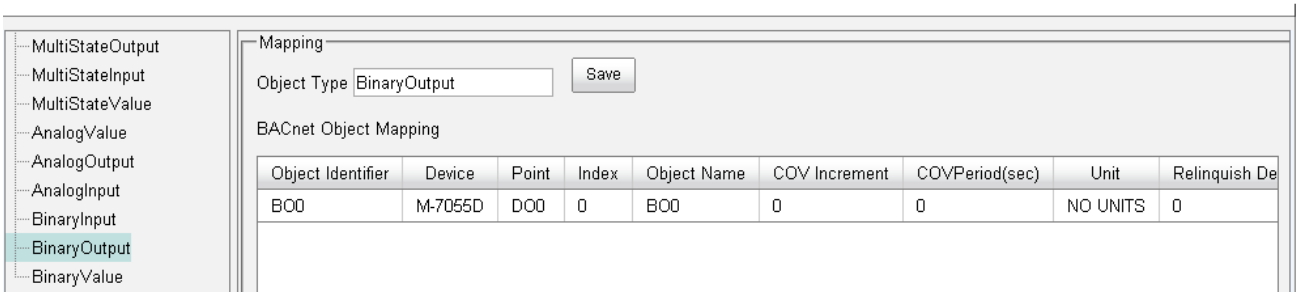
(1) Install the ICDT BACnet Pioneer
http://www.icdt.com.tw/main/index.php/2013-07-09-05-16-50/2013-07-18-14-43-35/file/24-bacnetpioneerv1001
Refer to the ICDT website for the details: http://www.icdt.com.tw

(2) M-7055D Setup as follows, DO.PWR wire to ***Power Supply +24VDC***, GND to ***Power Supply Ground***, and DO0 to DI0. Power up M-7055D and GW-5492 which LAN1 connects to the internet.

(3) GW-5492 is configured that ***BO0*** is mapping to DO0 of M-7055D and ***BI0*** is mapping to DI0 of M-7055D







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Refer to the websites for details:

GW-549x：

http://www.icpdas.com/root/product/solutions/industrial_communication/fieldbus/bacnet_ip/gateway/gw-5492.html

ftp://ftp.icpdas.com.tw/pub/cd/fieldbus_cd/bacnet/gateway/gw-5493/manual

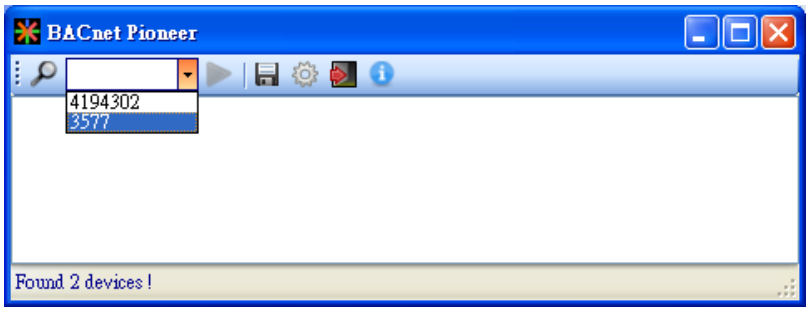
M-7055D：

http://www.icpdas.com/root/product/solutions/remote_io/rs-485/i-7000_m-7000/i-7055.html

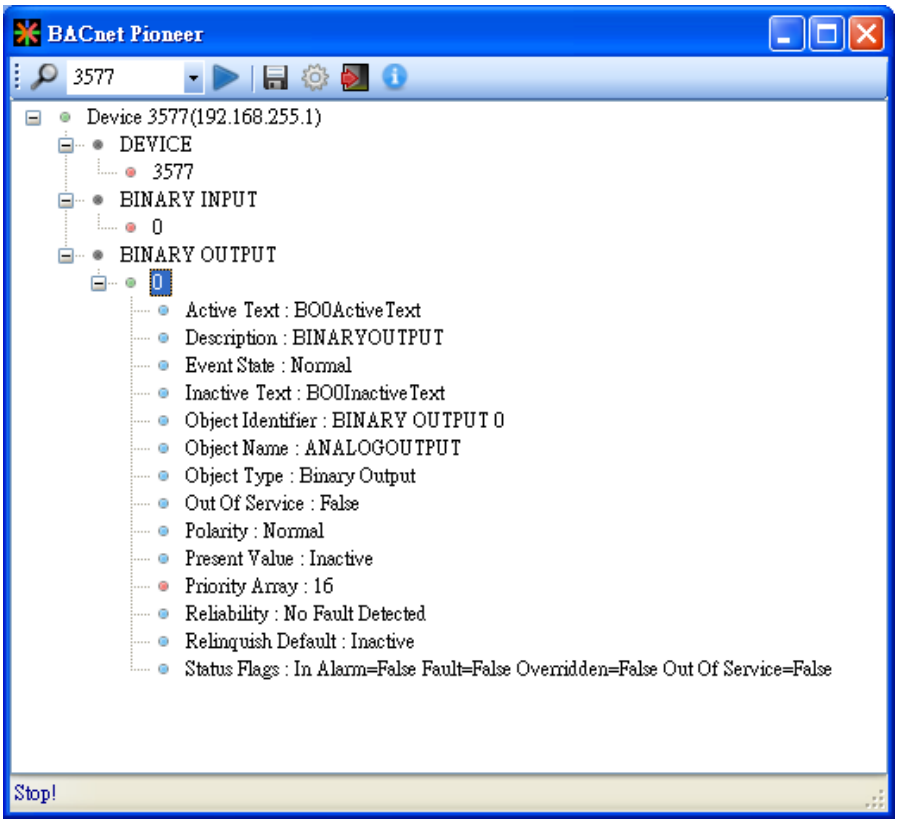
http://ftp.icpdas.com/pub/cd/8000cd/napdos/7000/manual/7000dio.pdf

(4) Execute 

to get the Device ID/Instance of your computer and GW-5492 (default 3577). Choose ***3577***,

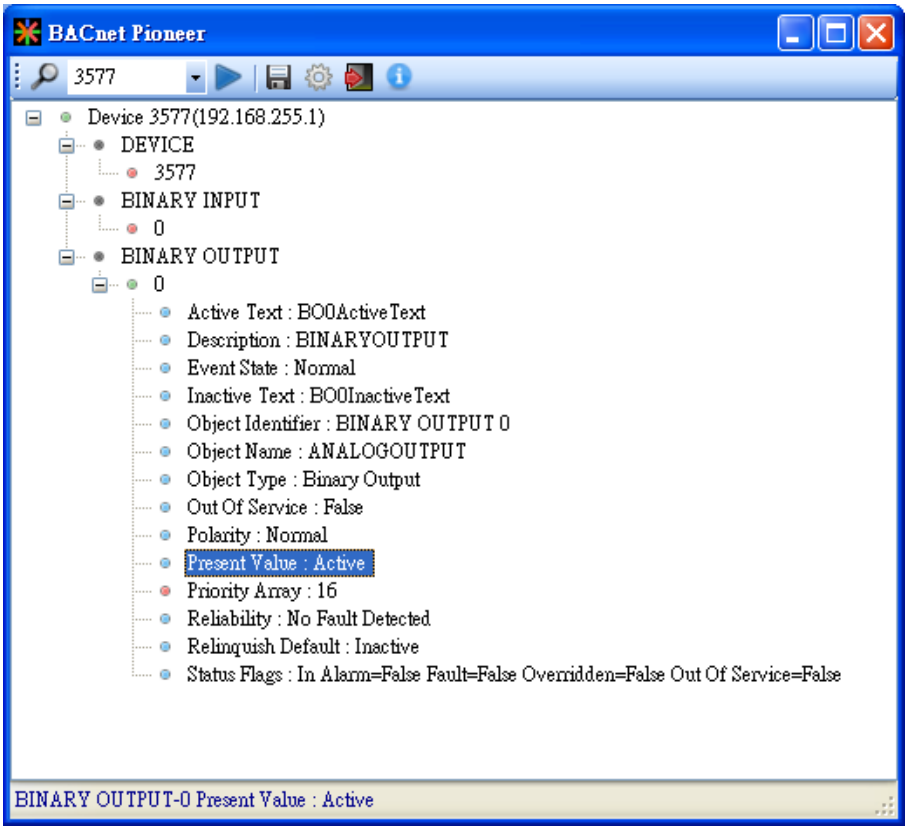


(5) Click on ***Device 3577(……)***, and it will scan the objects of GW-5492.

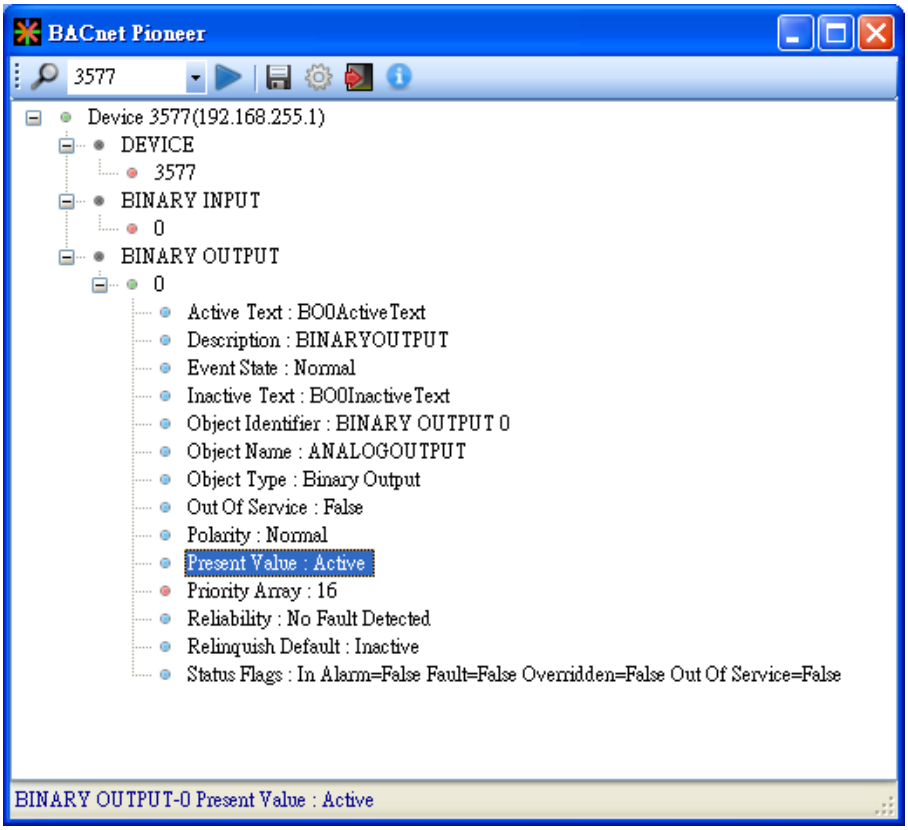


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(6) Click on ***BINARY OUTPUT→0***, and it will scan the properties and values of ***BO0***. Notice ***Out Of Service*** is ***False.***



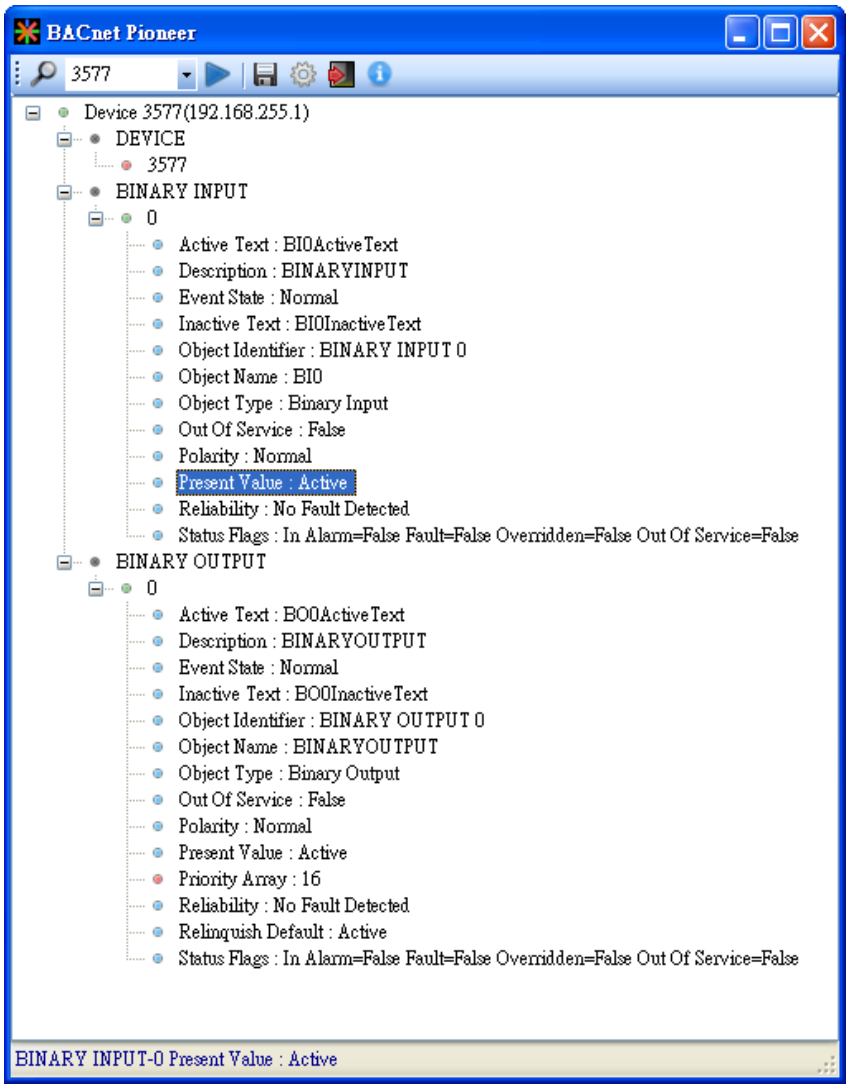
(7) Double Click on the item ***Present Value***, and set BO0 to ***Active***.



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(8) Click on ***BINARY INPUT→0→Present Value***, and check the status of BI0 is ***Active***.

- Notice ***Out Of Service*** is ***False***
- In the ICDT Pioneer, the data will be updated while you click and stay on the item.



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2. How to manipulate GW-549x via BACnet VTS?

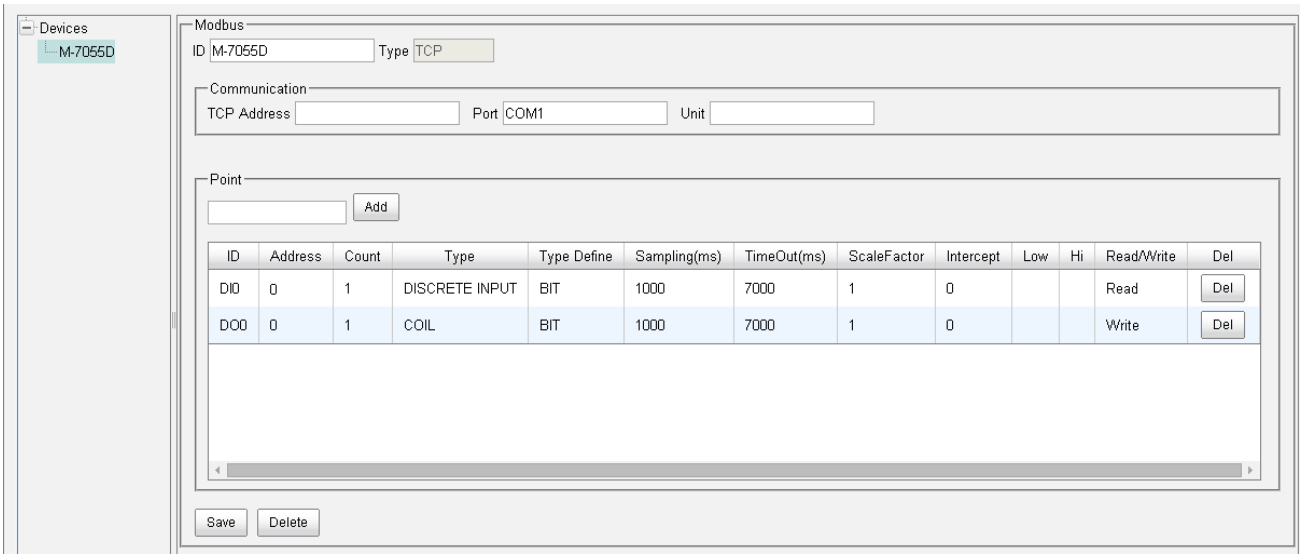
This part is The following example is how to switch on the DO[0] and read DI[0] back on ICPDAS M-7055D, a Modbus/RTU Slave, connected to GW-5492 via Visual Test Shell (VTS), and you can test GW-5493 with Modbus/TCP Slave in the similar way.

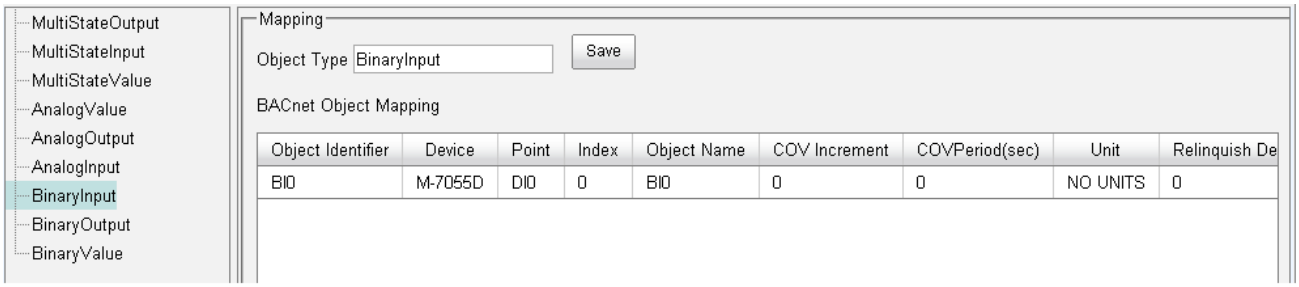
(1) Get Visual Test Shell (VTS). Refer to the websites,

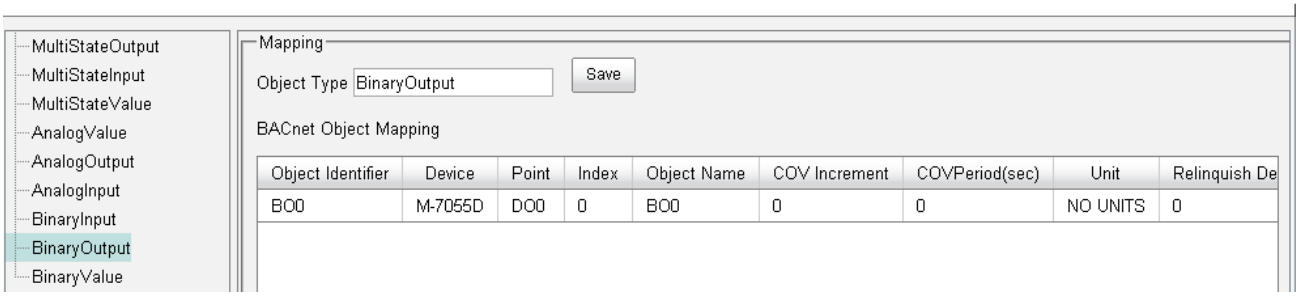
http://vts.sourceforge.net/ or http://sourceforge.net/projects/vts

(2) M-7055D Setup as follows, DO.PWR wire to ***Power Supply +24VDC***, GND to ***Power Supply Ground***, and DO0 to DI0. Power up M-7055D and GW-5492 which LAN1 connects to the internet.

(3) GW-5492 is configured that ***BO0*** is mapping to DO0 of M-7055D and ***BI0*** is mapping to DI0 of M-7055D







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Refer to the websites for details:

GW-549x：

http://www.icpdas.com/root/product/solutions/industrial_communication/fieldbus/bacnet_ip/gateway/gw-5492.html

ftp://ftp.icpdas.com.tw/pub/cd/fieldbus_cd/bacnet/gateway/gw-5493/manual

M-7055D：

http://www.icpdas.com/root/product/solutions/remote_io/rs-485/i-7000_m-7000/i-7055.html

http://ftp.icpdas.com/pub/cd/8000cd/napdos/7000/manual/7000dio.pdf

(4) Execute 

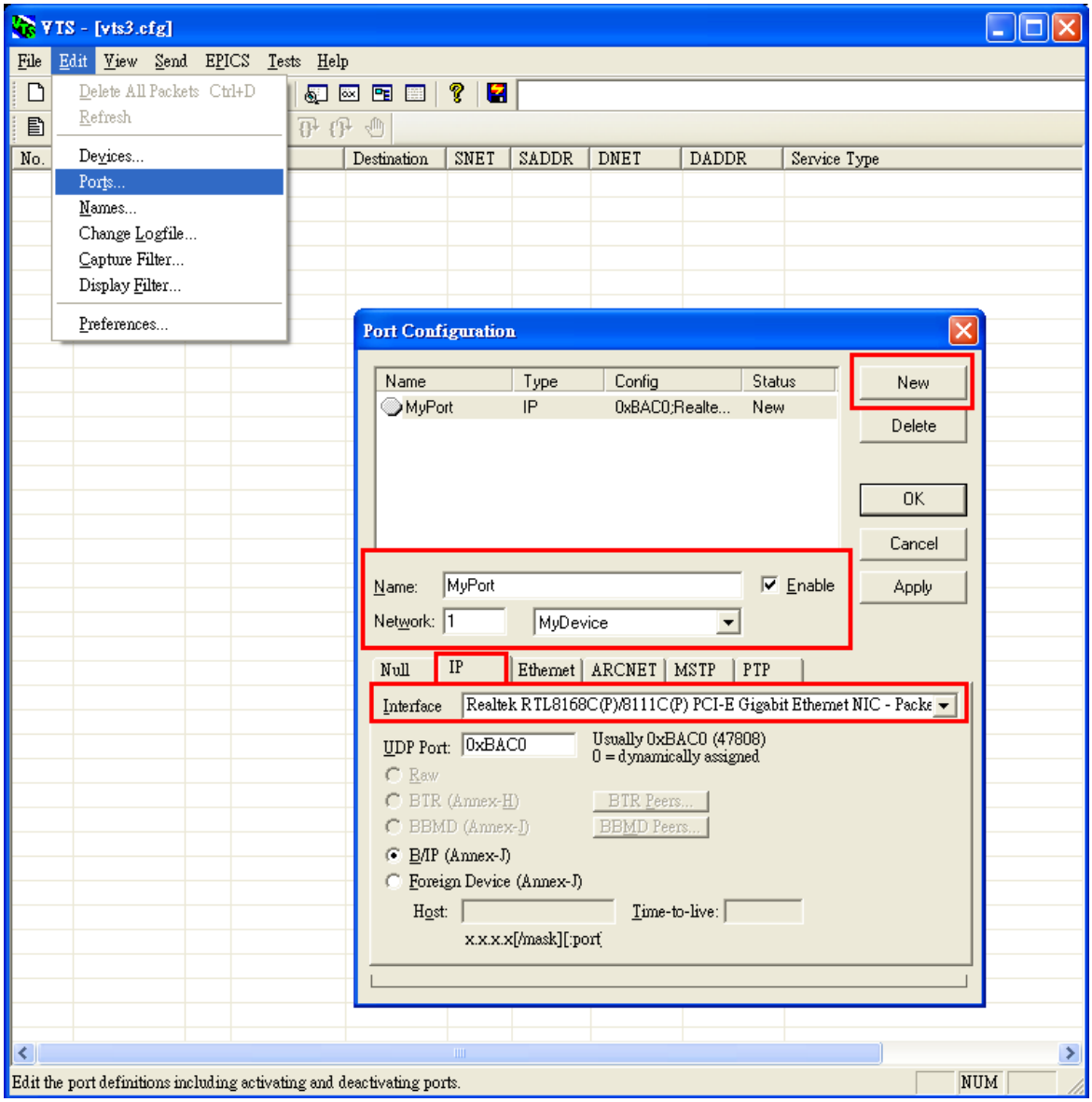
. If you've configured the Devices, Ports and Names in VTS, you can jump to step(8).

(5) Click on Edit(Devices…, set the Name to MyDevice, Instance to 1111, and push OK.

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(6) Click on ***Edit*** → ***Ports…***, push ***New*** button and configure as follows,

- Name set to ***MyPort***. Check on ***Enable***
- Network set to ***1***. Choose ***MyDevice***
- On ***IP*** Page, ***Interface*** choose one network device which can communicate with GW-5492
- Push ***OK*** or ***Apply*** to continue

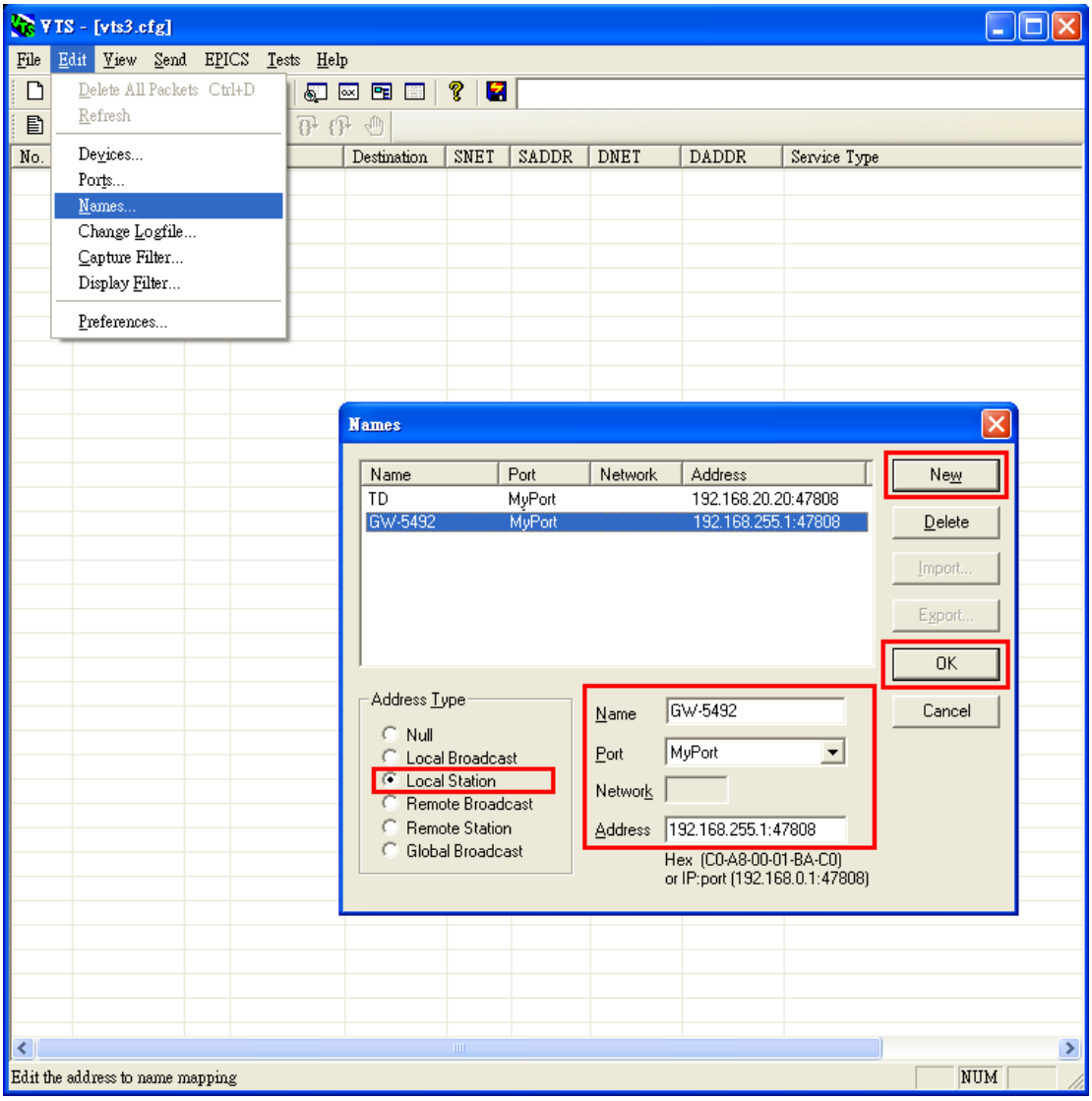


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(7) Click ***Edit→Names…*** , Push ***New*** button and the configuration as follows,

- Address Type choose ***Local Station***
- Name is ***GW-5492***
- Port choose ***MyPort***
- Address set the IP of GW-5492: ***192.168.255.1:47808 (GW-5492's default setting)***
- Push ***OK*** and continue

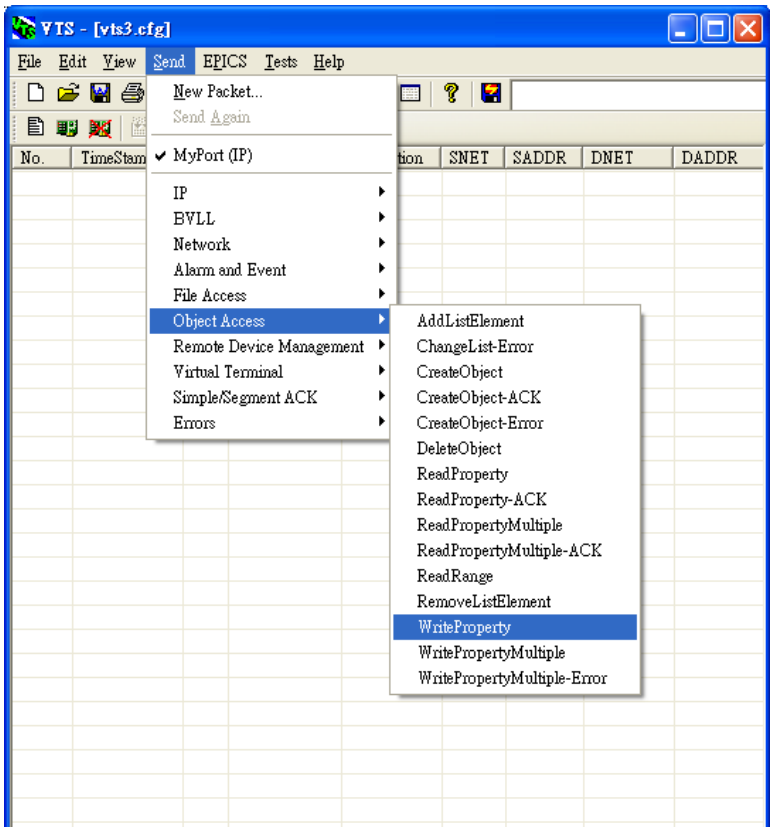
Notice: TD is for your computer, and do not remove it.



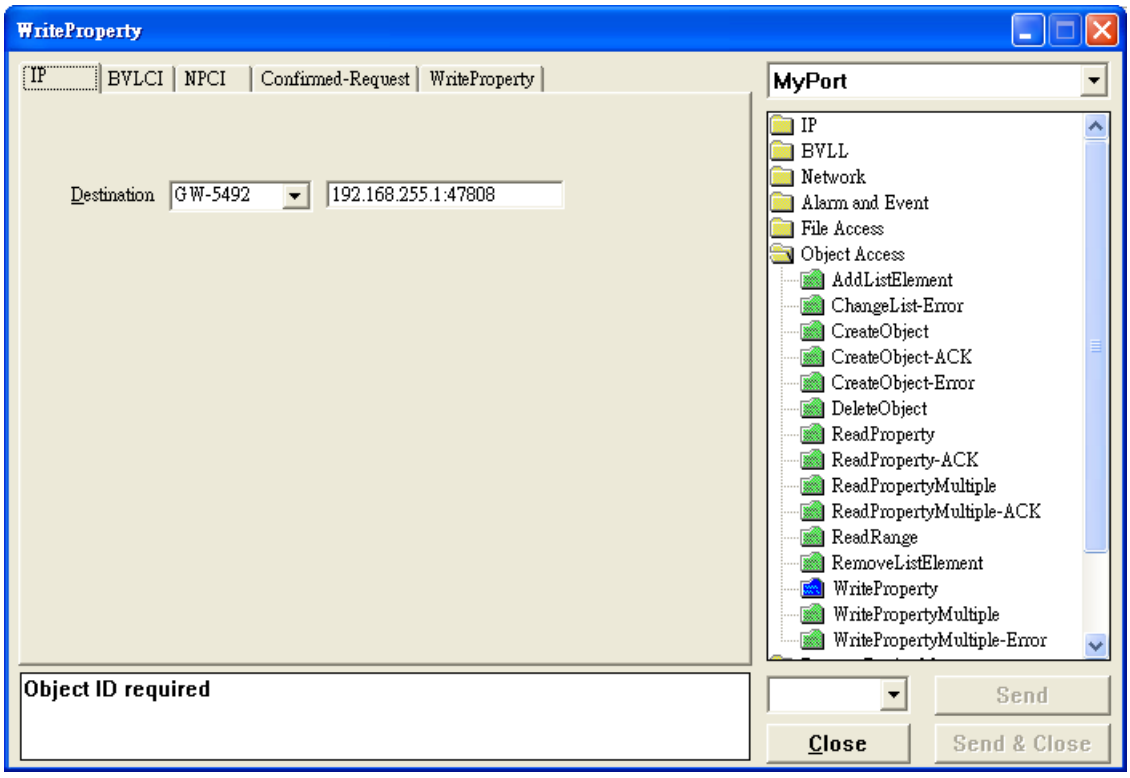
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Activate DO0

(8) Click on ***Send***→***Object Access***→***WriteProperty***, and WriteProperty window shows up.

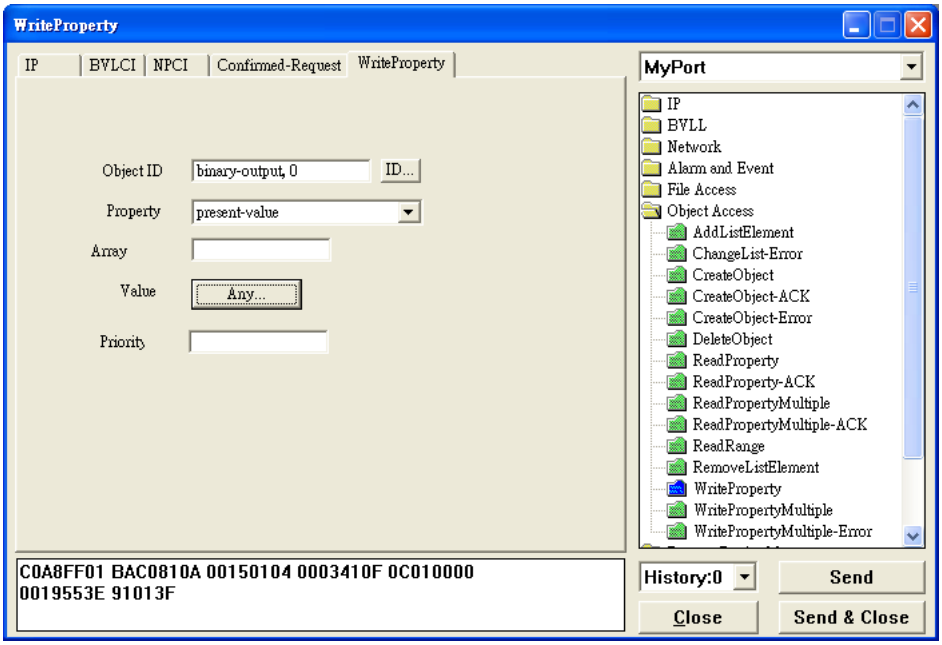


(9) WriteProperty →***IP*** Page：Destination chooses ***GW-5492***

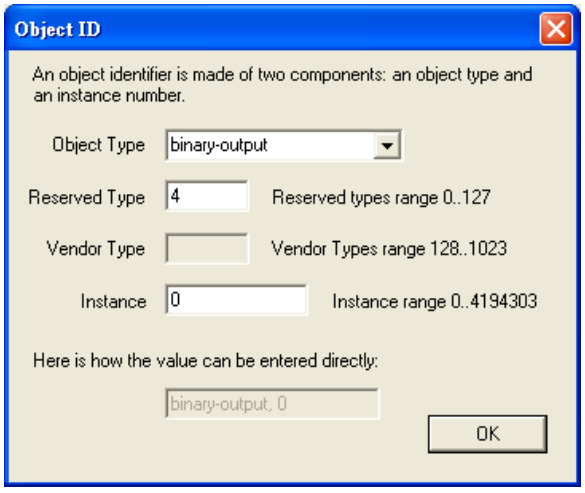


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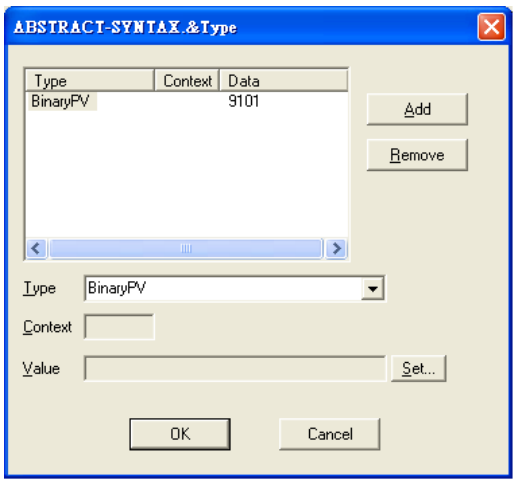
(10)WriteProperty →***WriteProperty*** Page, set ***binary-output, 0***, ***present-value***, ***BinaryPV(active)***, and push ***Send & Close*** button. The steps are described as follows,

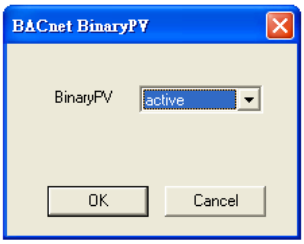


- Object ID: Push ***ID…*** button, and choose ***binary-output***, and instance is ***0*** while BO***0***.



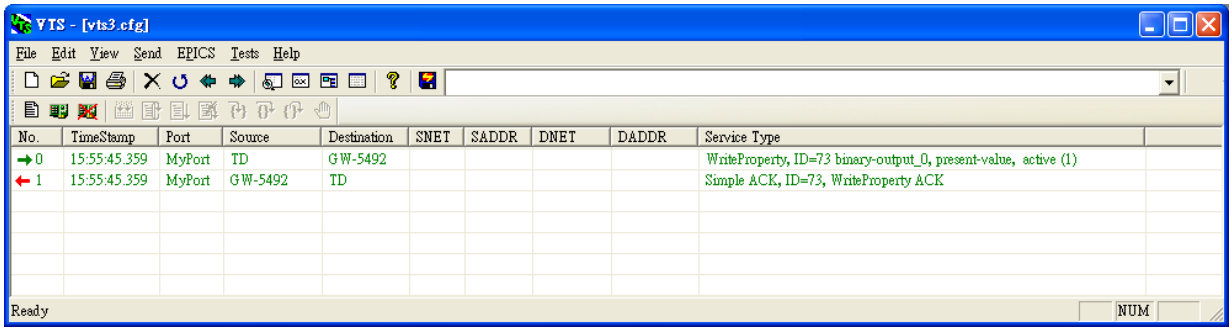
- Property choose ***Present-Value***
- Value: Push ***Any…*** button, and a window shows up. Choose ***BinaryPV*** and push ***Set…*** and set ***active***.





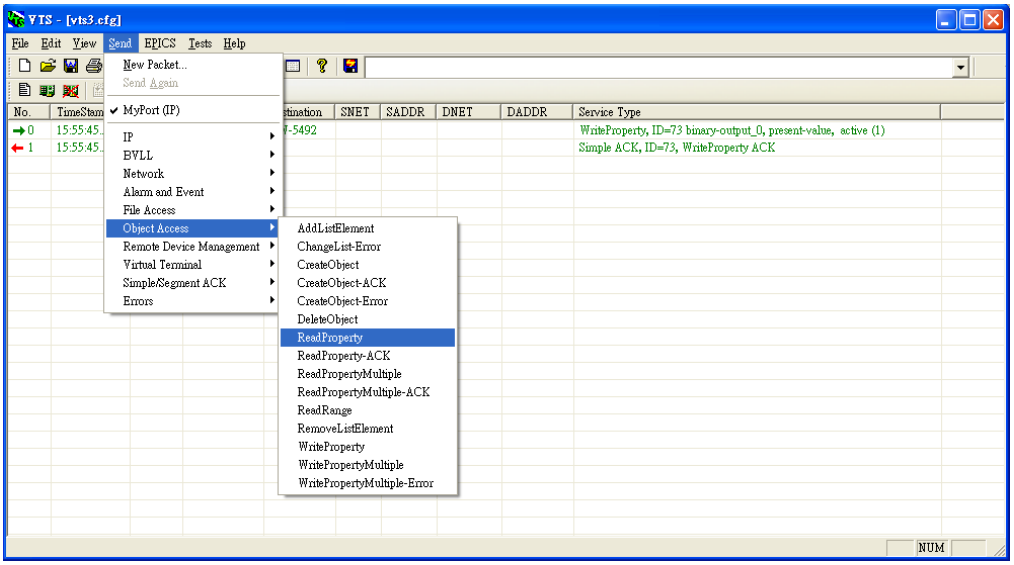
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- Push ***Send & Close*** button, and VTS will show the transmit packets and receive the GW-5492 feedback one.

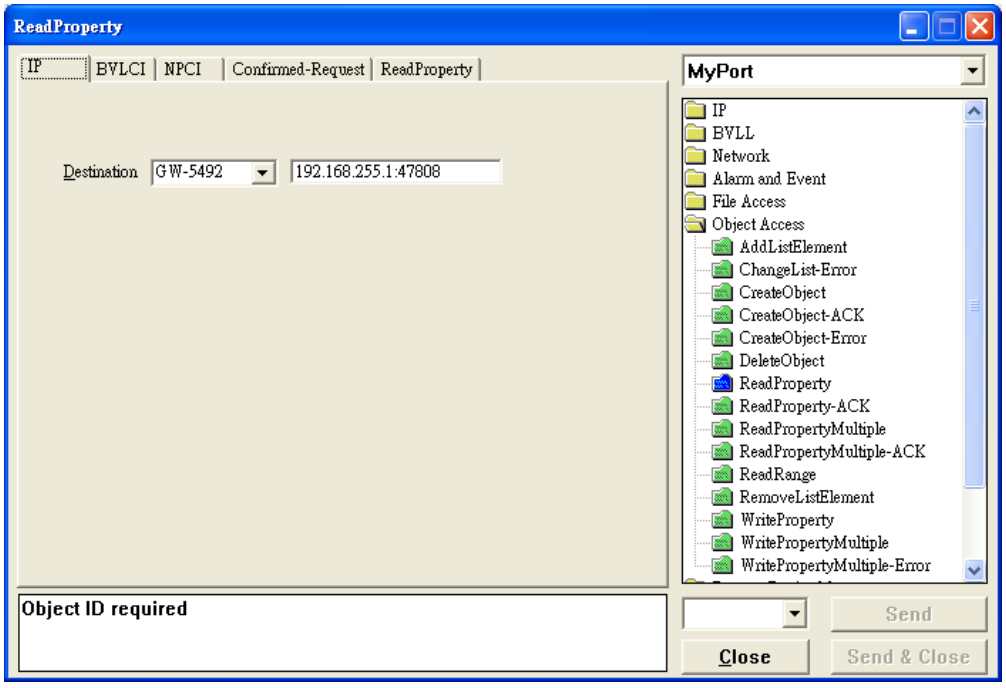


Get DI0 status (***Active***)

(11) Click ***Send***→***Object Access***→***ReadProperty***, and ReadProperty window will show up.

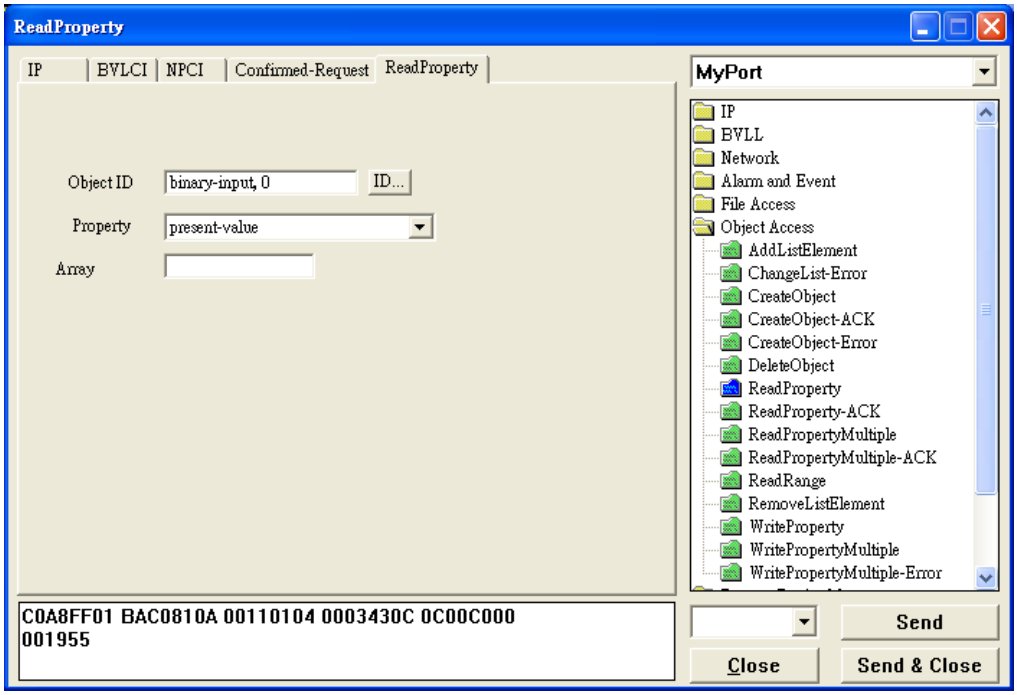


(12) ReadProperty →***IP*** Page: Destination chooses ***GW-5492***

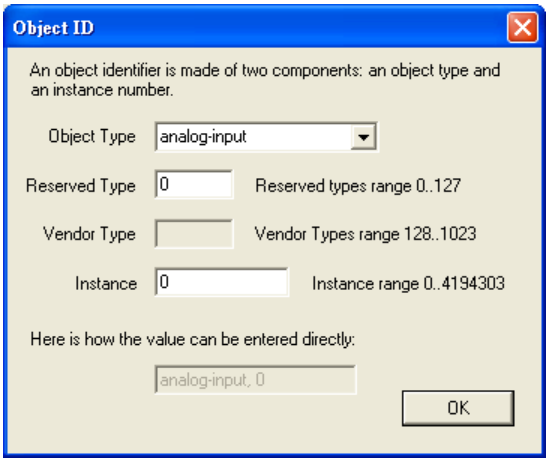


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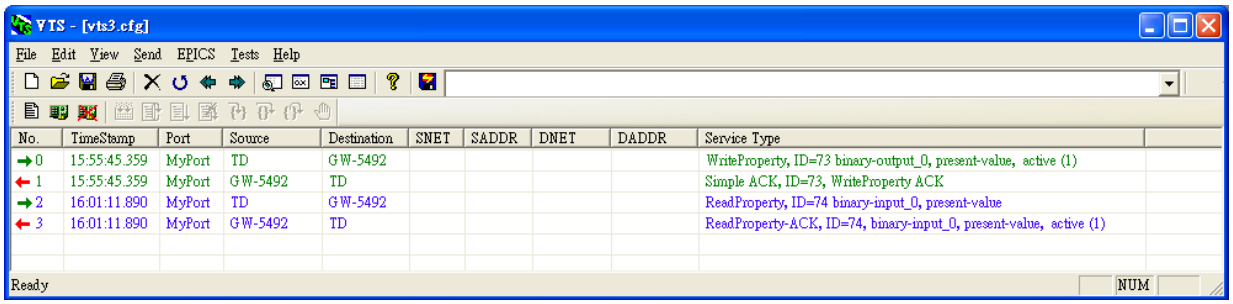
(13) ReadProperty→***ReadProperty*** Page, set ***binary-input, 0, present-value***, and push ***Send & Close*** button. The steps are described as follows,



- Object ID: Push ***ID…*** button and choose ***binary-input***, and instance is ***0*** while BO***0***.



- Property: choose ***Present-Value***
- Push ***Send & Close*** button, and VTS transmits packet and you can confirm that GW-5492's DI0 is ***Active.***



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3. How to reset the login account and password of the GW-5492 and GW-5493?(2023/02/11, Johney)

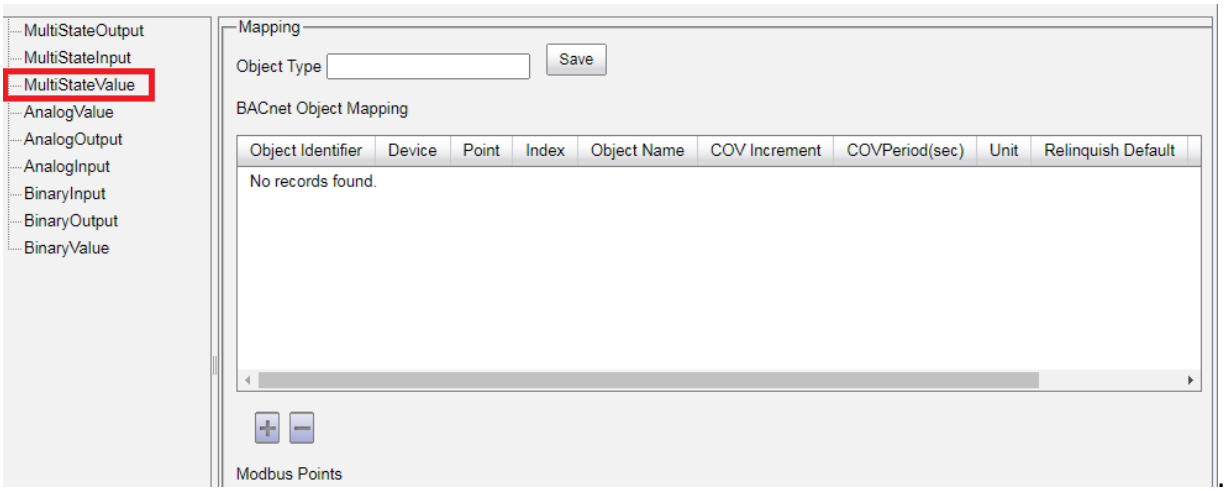
Please try to follow the steps below:

(1) Set rotary switch as 8
(2) Connect COM3 TxD and RxD together
(3) Reset your device
(4) After 3 minutes, it will restore as factory default setting.
(5) Please turn rotary switch as 0 and power on again.

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4. What is the reason why I turn BACnet button start and it will come to stop state of the GW-5492?(2023/04/15, Johney)

The GW-5492 and GW-5493 do not supprt BACnet “MultiStateValue” object. If you use the objects in your configuration, it will make bacnet state come “start” state to "stop" state. Please use BACnet object “AV” or “AI” or “AO” instead.

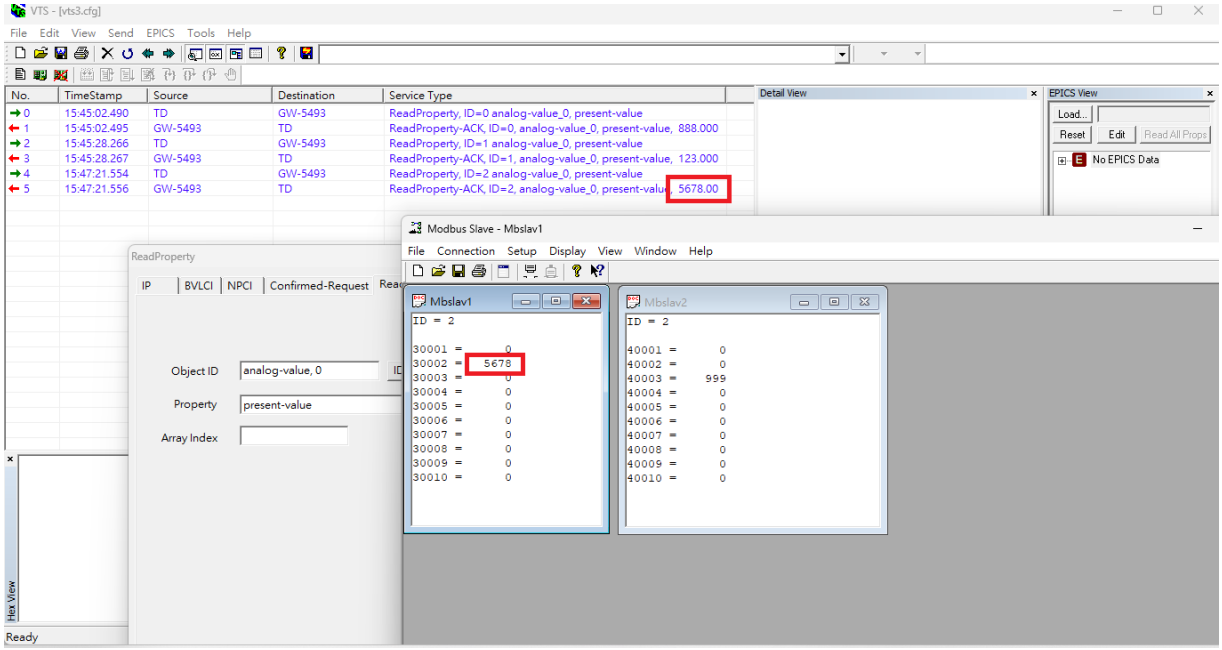


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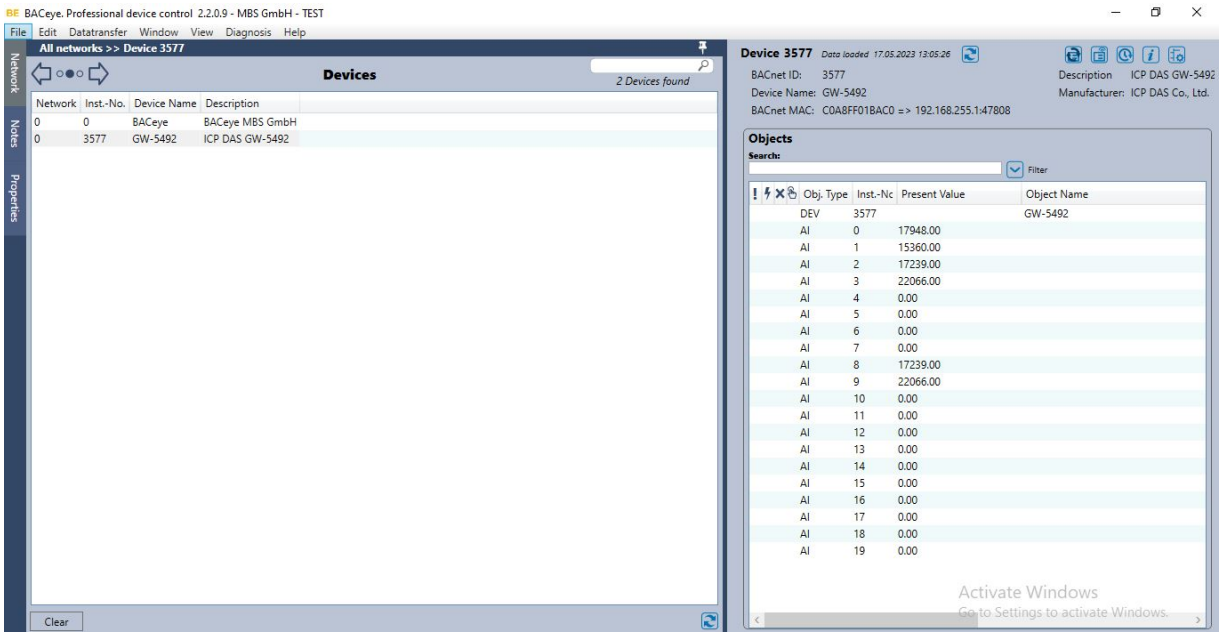
5. The GW-5492 and GW-5493 can not be found by Yabe software. How to slove that?(2023/05/22, Johney)

The Yabe software will send “Who-Is” request to search the BACnet devices. Because the GW-5492 and GW-5493 will not reply to the “Who-is” request, the Yabe software can not find them. The user can use VTS or Baceye software instead. These two softwares can be configured with the target IP of theBACnet device. These softwares will communicate with the BACnet device directly.

Here shows the VTS software.



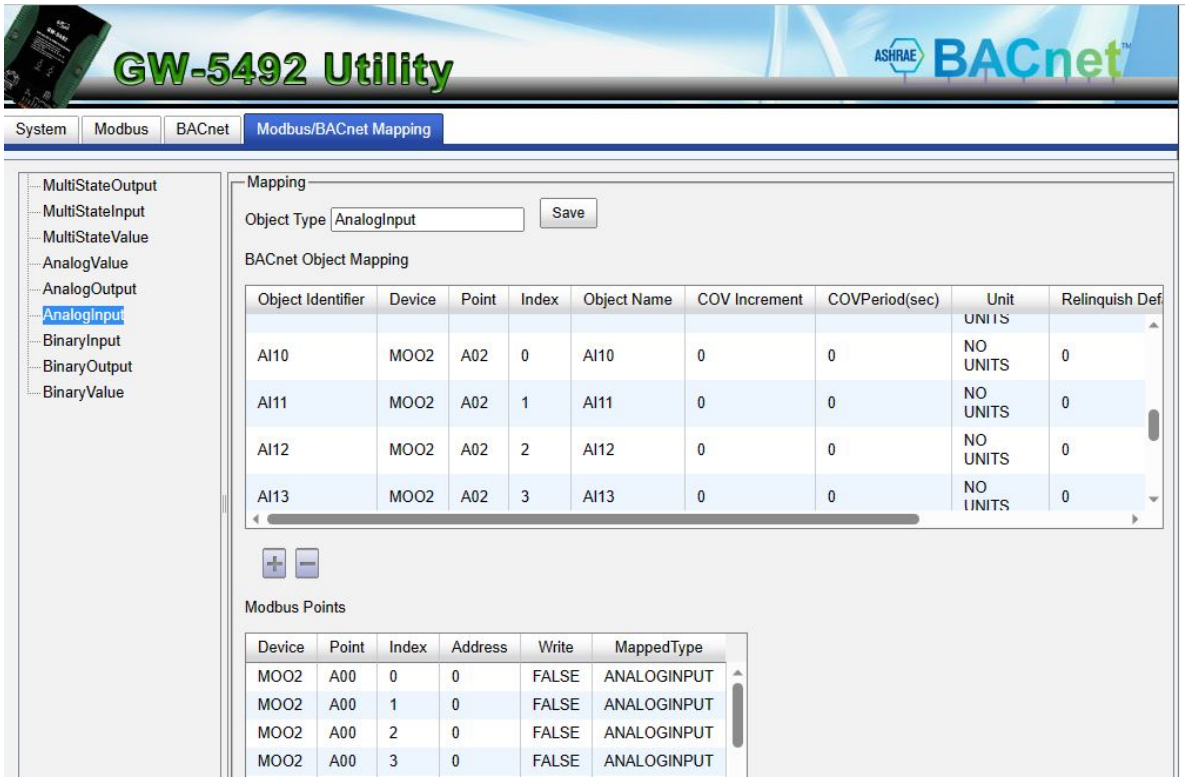
Here shows the Baceye software



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6. The GW-5492 and GW-5493 have problem with that one modbus register maps two BACnet objects. How to solve that?(2023/06/19, Johney)

The GW-5492 and GW-5493 do not support duplicate mapping modbus register. One modbus register mapped to two or more BACnet object is illegal. That one modbus register will be confused when multiple BACnet objects write back regularly.



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