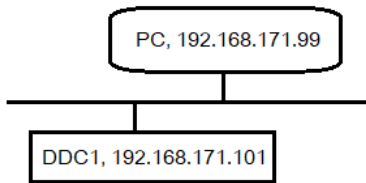# TT231102 – OPENweb 12 - BACnet BBMD Configuration

1. In TT231101, we show you how to setup BBMD in OPEN controller. In this document, we will show you how to setup BBMD in OPENweb.
2. Normally BACnet software/controller can only communicate within the same subnet, like this.


3. If you've BACnet device that are on another subnet, like below, then you will not be able to communicate with it directly.
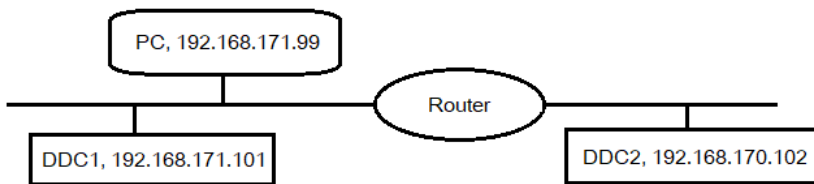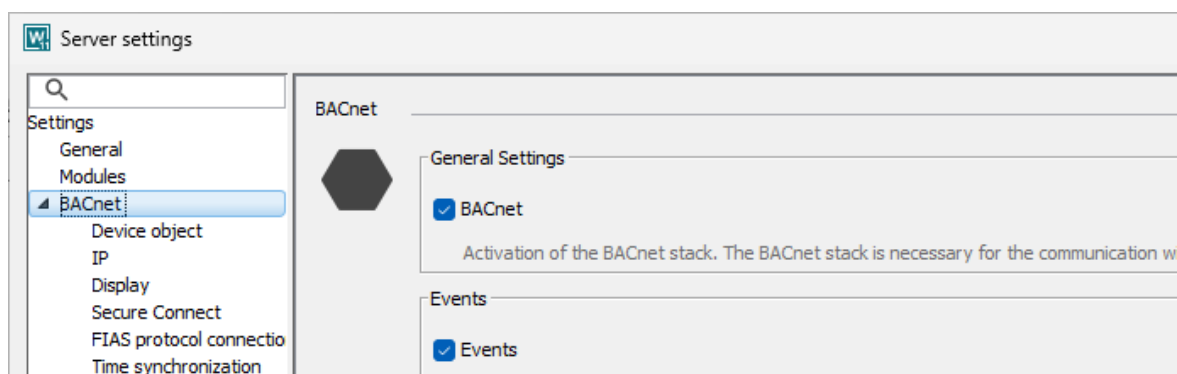

4. When you use a BACnet viewer (e.g. YABE) to search the devices on the network, you will only see those that are on the same subnet, like below.
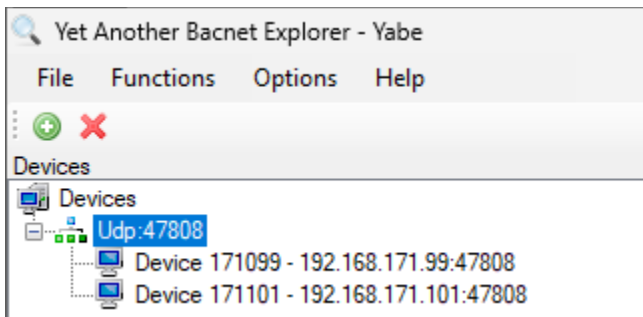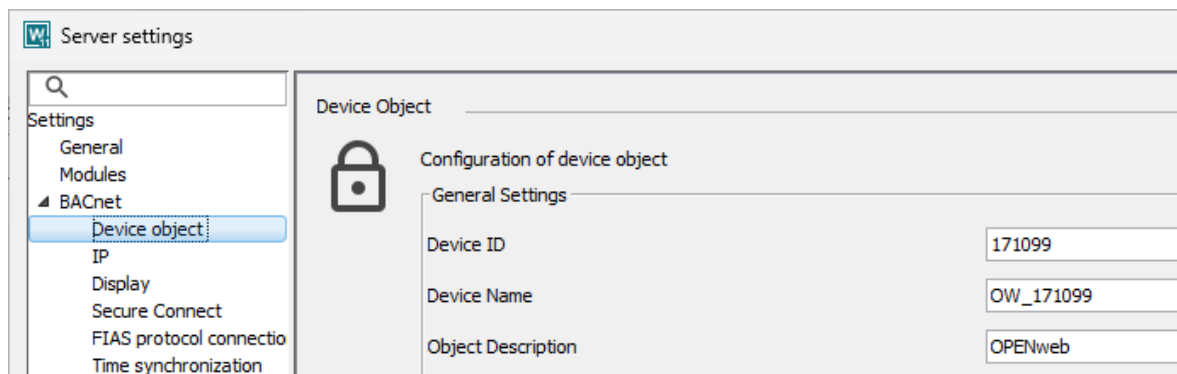

5. To communicate BACnet controller on the other subnet, you will need to setup BBMD in one of the PC/controllers on each subnet. In OPENweb, click on "Configuration", "Server", "Settings".
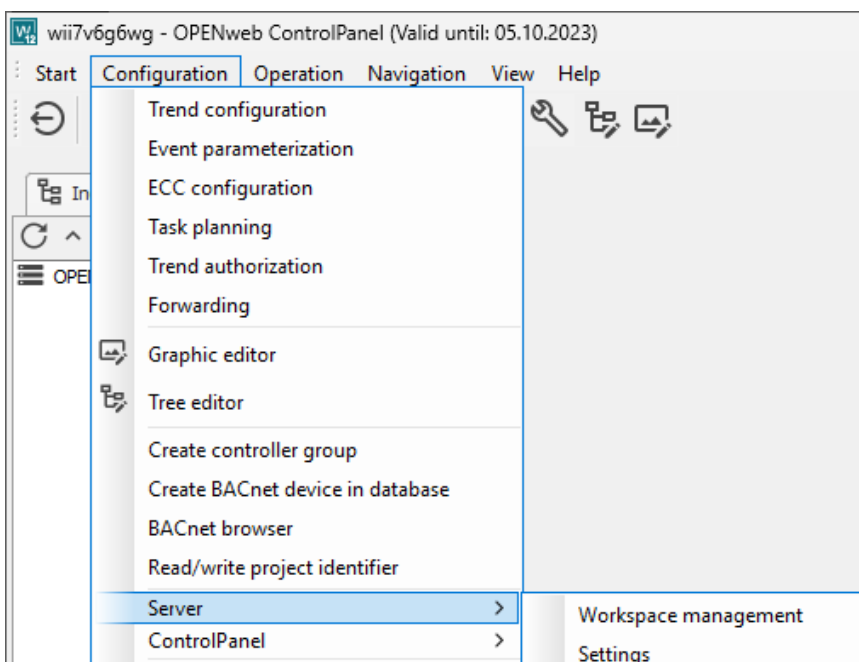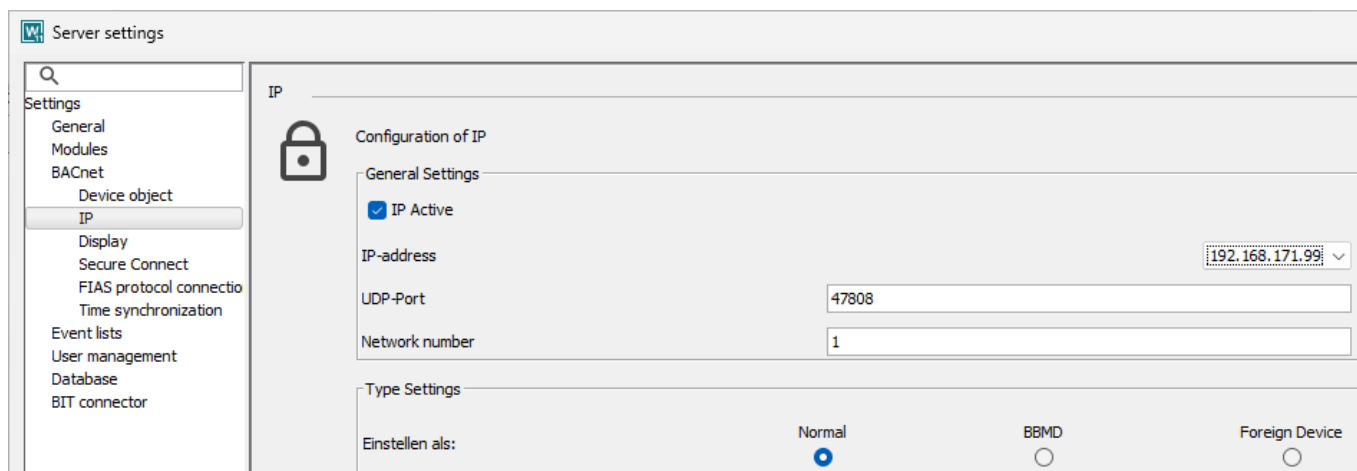
6. Under "BACnet", "General Settings", enable "BACnet".
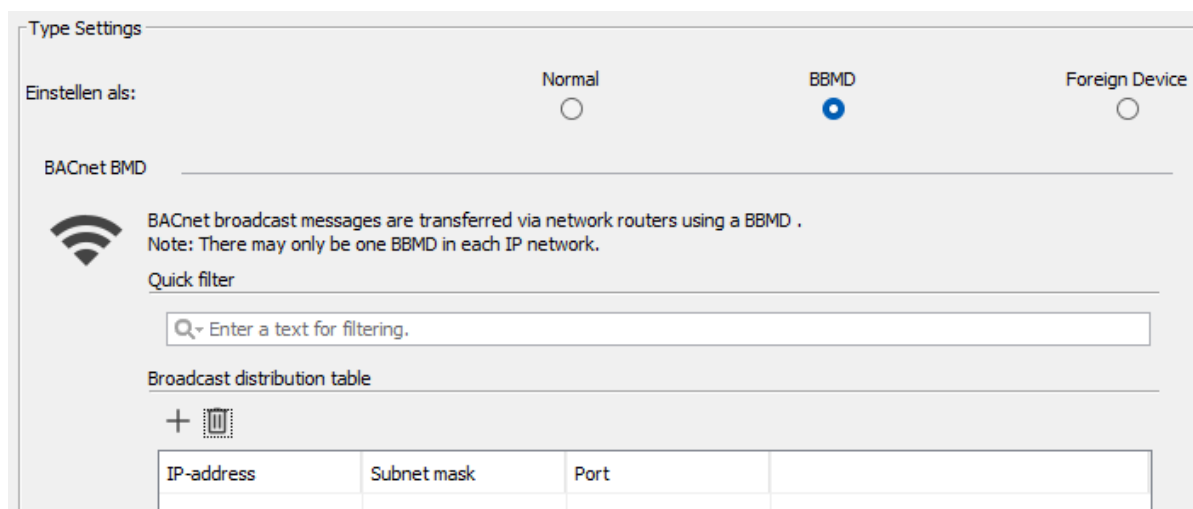

7. Under "Device object", set the "Device ID" and "Device Name".

8. Under "IP", set "IP Active", "IP-address".

9. Enable "BBMD". If it is empty, click the "+" icon to add the BBMD controller on the other subnet.

10. Set the "IP-address" of the controller on the other subnet. Click "OK" and click "YES" to restart the BACnet service.

11. Next, we will need to enable BBMD in the controller "192.168.170.102" on the other subnet. Please make sure you can access the controller on the other subnet, for example, you can ping it successfully.

12. Under "System", "BACnet", Scroll down until you see "Broadcast Distribution Table". Activate BBMD, set the IP address of the controller on the other subnet. Click "Save Changes". Click "Restart BACnet Process" and wait until it's finished and return to the "BACnet IP and BBMD Configuration" page. You can refer to TT231101 for more information.

13. Now you'll be able to see the BACnet controller "192.168.170.102". You can see all other controllers on the same subnet as "192.168.170.102" can communicate through the BBMD controller "192.168.170.102", so only 1 controller on each subnet is required to setup as BBMD.
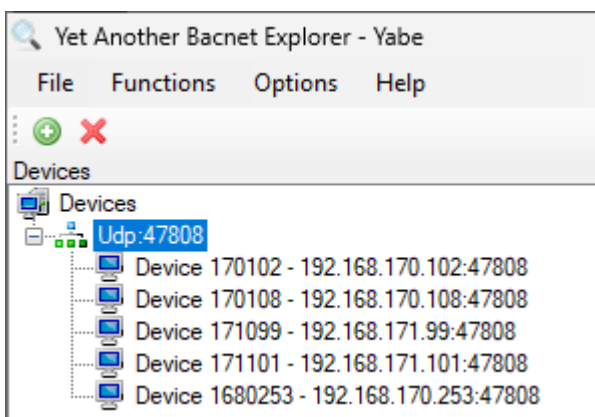
14. To see the BACnet controller and points in OPENweb, click on "Configuration", "BACnet browser".
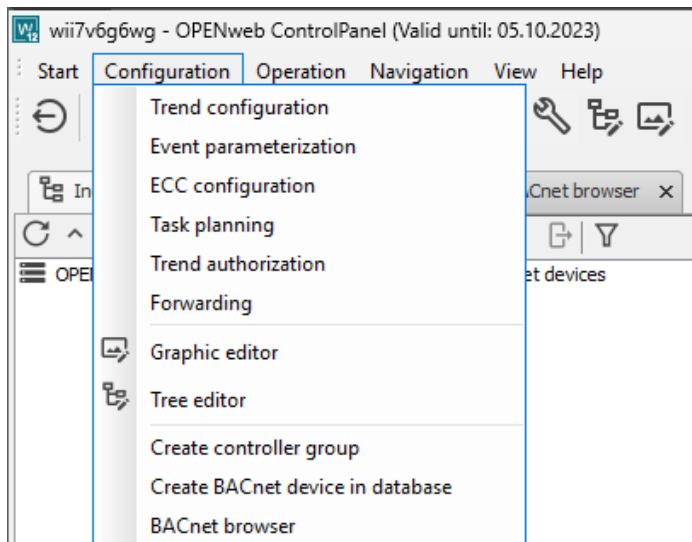
15. Double click on "BACnet devices" to browser the network and find all the BACnet devices.

16. Click on the BACnet devices (e.g. 172102) to see all the BACnet objects. Please refer to TT220803 for more information regarding BACnet EDE Export.
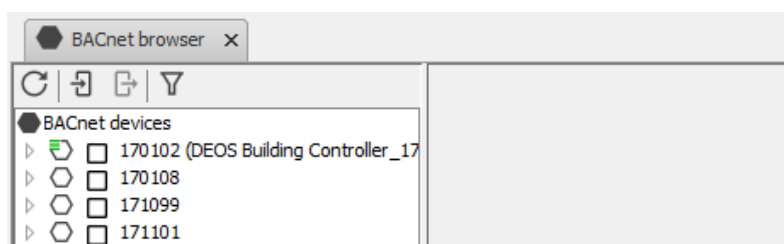

Devic...	Devicename	Description	Object-Type	Instance	Object-Name	Present value
170102	DEOS Building Controll...	Fault message	notification-...	40	DDC102.NCO\Fault m...	
170102	DEOS Building Controll...	Alarm message	notification-...	30	DDC102.NCO\Alarm m...	
170102	DEOS Building Controll...	-	analog-input	2000606	- (DDC102.0.00.AI6)	0.0
170102	DEOS Building Controll...	-	analog-input	2000605	- (DDC102.0.00.AI5)	0.0
170102	DEOS Building Controll...	holiday dates	calendar	2990001	holiday dates	FALSE
170102	DEOS Building Controll...	-	analog-input	2000607	- (DDC102.0.00.AI7)	0.0
170102	DEOS Building Controll...	special dates	calendar	2990002	special dates	FALSE
170102	DEOS Building Controll...	AHU Return Air Temp...	analog-input	2000600	AHU Return Air Temp...	0.154476

17. Please note the BACnet devices with different IP address and/or subnet mask, like below, cannot communicate when they're connect together on the same network (without a router).
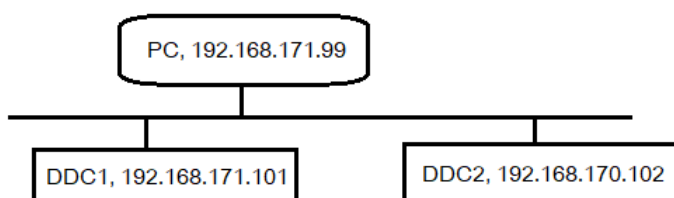
18. This won't work even after you setup BBMD as above. A possible solution is to change the DDC2 IP to "192.168.171.102" (same subnet with the other BACnet devices).
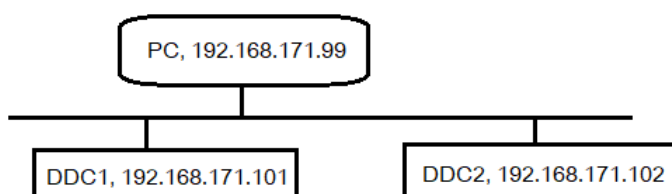
19. BACnet communicates on UDP protocol, the server listens on UDP port 47808 by default. This port number is reserved by IANA, and has been chosen to be remembered in hexadecimal form - BAC0. You may need to setup the router to allow/enable this (UDP port 47808) communication on both sides of the network.
20. Please note that you need to set the gateway correctly in both BBMD controllers, for example

	Controller program ^	Information	Description	Program version	IP address	Subnet mask	Gateway
1	DDC102	OPEN 600 EMS		1.086e	192.168.170.102	255.255.255.0	192.168.170.1

Q▾ Filter entry