

Set up RESOL DL3 being Compatible to BacNet/IP

Resol DL3 datalogger is able to talk to BacNet system. It has to be emphasized that DL3 is NOT able to talk to BacNet binary directly, while it transmits parameters and readings to BacNet system via BacNet/IP.

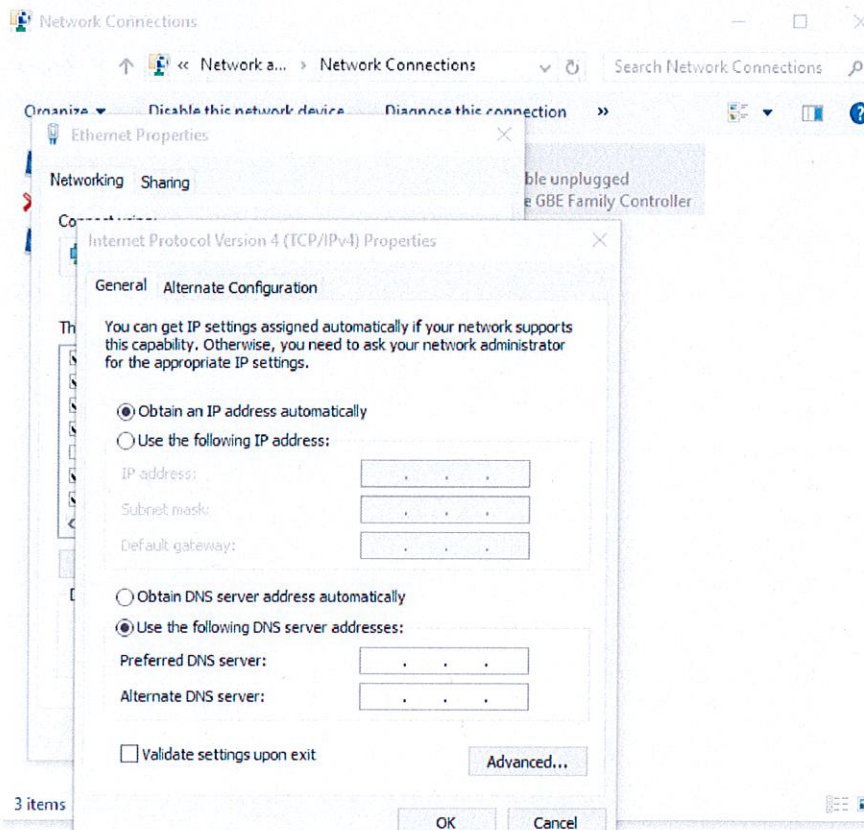
What information do you need from building automation person?

- Static IP address, Subnet Mask, and Gateway
- BacNet address

Before starting setting up the RESOL DL3 to be compatible to BacNet/IP, please make sure the DL3 is with default factory settings; if you are not sure about this, please hold the key at middle and choose **Erase--> Reset--> Erase? Yes** under "Settings". After DL3 gets reset, the DL3 is with default factory settings.

Set up Procedures:

1) Connect your computer to DL3 directly (RJ45 cable) , and mak sure your computer obtains an IP automatically.

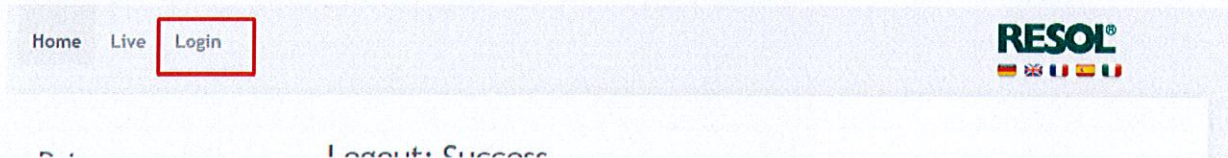


Also, hold the middle key on the DL3 and check Settings--> NetWork--> LAN--> you will find current DL3 IP address and now it is a DHCP type.

2) Input the IP address got from the screen of DL3 into a browser. We strongly suggest to work with **FireFox**.

3) After you access to DL3 web interface, please click **Login** at the top.

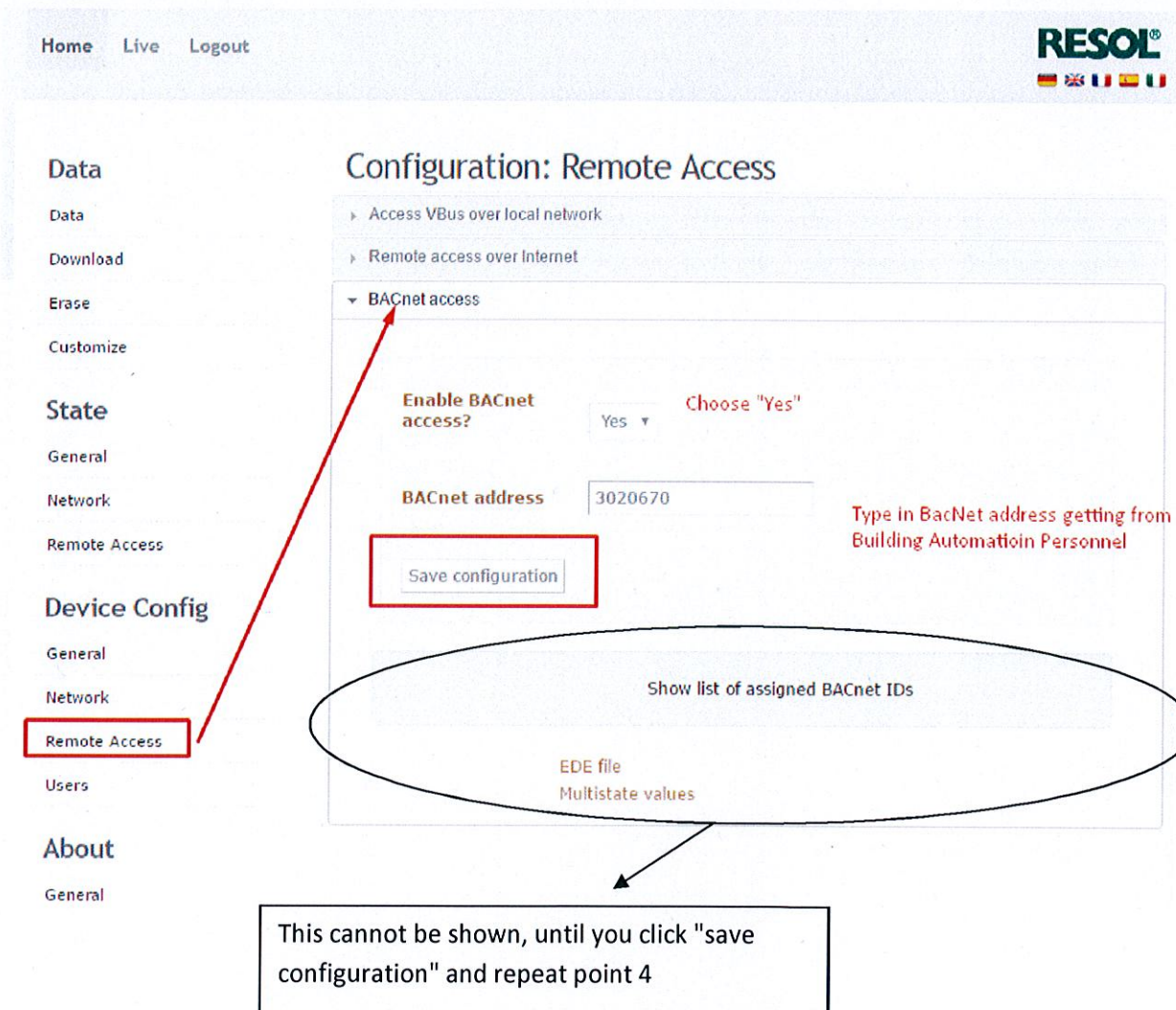
User name: admin & Password: admin.



4) Clicking Device Config--> Remote Access--> BACnet Access.

Enable BACnet access--? Yes

Input BACnet address



5) Please click "show list of assigned BACnet IDs", and you will see all parameters in the left box.

The screenshot shows the 'BACnet: List' configuration page. On the left is a sidebar with navigation links: Data, Download, Erase, Customize, State, General, Network, Remote Access, Device Config, General, Network, Remote Access, Users, About, General, Powered by, History, and Links. The main area is titled 'BACnet: List' and contains a form for device configuration. At the top, it says 'Edit Device Name, it will show on the BACnet Interface'. The 'Device name' field contains 'VBusBACnetServer' and the 'Device description' field contains 'RESOL VBus-to-BACnet Server'. Below these are 'save' and 'back' buttons. A red annotation points to the 'save' button, stating: 'The BACnet ID of each parameter selected cannot be generated until you click the blue "save" button and it turns from Pale to Solid Blue'. Below the buttons is a 'Show all' dropdown menu. A red annotation points to this menu, stating: 'Each drop down menu allows you to choose any group of parameters shown in the left box right below'. The main list of parameters is divided into two columns. The left column lists parameters under the heading 'VBus 1: DeltaSol MX [Regler]'. The right column lists parameters under the heading 'Selected data fields'. Red arrows point from the left column to the right column, indicating the transfer of parameters. A red annotation 'Double Click' points to the right column. The parameters in the left column are: Temperature sensor 1, Temperature sensor 2, Temperature sensor 3, Temperature sensor 4, Temperature sensor 5, Temperature sensor 6, Temperature sensor 7, Temperature sensor 8, Temperature sensor 9, Temperature sensor 10, Temperature sensor 11, Temperature sensor 12, Temperature sensor 13, Temperature sensor 14, Temperature sensor 15, Irradiation sensor 16, Temperature sensor 17, Temperature sensor 18, and Temperature sensor 19. The parameters in the right column are: BACnet ID: 19, Temperature sensor 2, VBus 1: DeltaSol MX [Regler], BACnet ID: 20, Temperature sensor 3, VBus 1: DeltaSol MX [Regler], BACnet ID: 21, Temperature sensor 4, VBus 1: DeltaSol MX [Regler], BACnet ID: 22, Temperature sensor 5, VBus 1: DeltaSol MX [Regler], BACnet ID: 24, Temperature sensor 7, VBus 1: DeltaSol MX [Regler], BACnet ID: 38, Flow rate sensor 13, VBus 1: DeltaSol MX [Regler], BACnet ID: 49, Pump speed relay 1, VBus 1: DeltaSol MX [Regler], and BACnet ID: 50. A red annotation points to the 'BACnet ID' field in the right column, stating: 'The BACnet ID of each parameter selected cannot be generated until you click the blue "save" button and it turns from Pale to Solid Blue'.

5.1 Each drop down menu allows you filter out which parameters you would like to see in the left box.

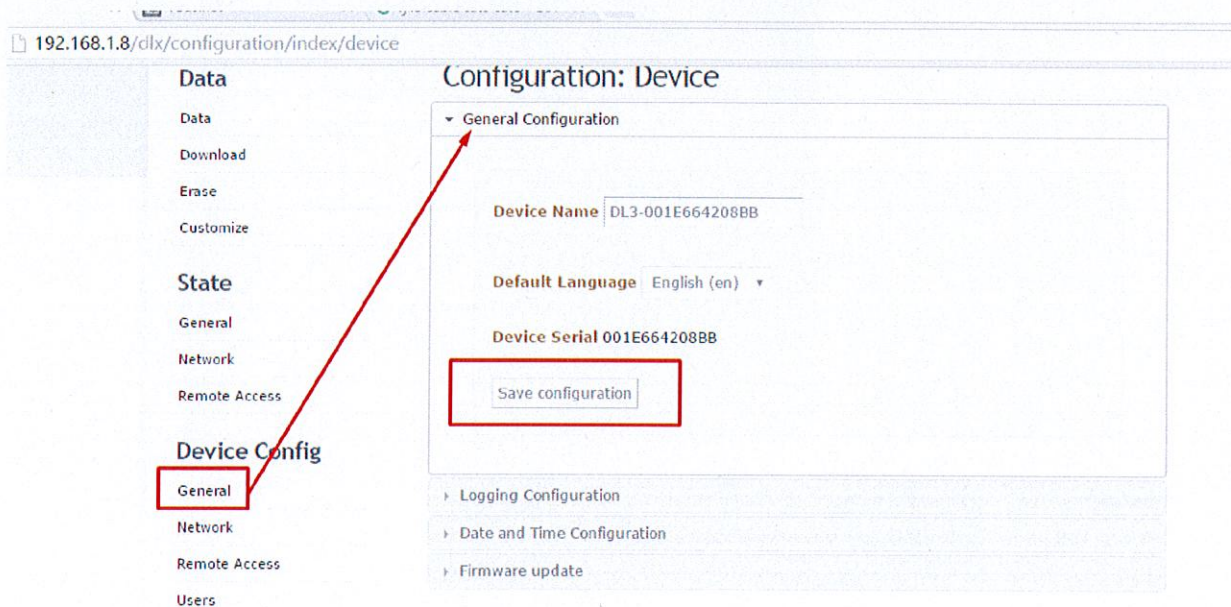
5.2 The right box is **selected data fields**. You double click the parameters you like, and they will automatically show up in the right box; or you hold the parameter in the left box and move it to the right box, and release your mouse, you can still see the parameter show up in the right box.

5.3 After completely selecting all parameters and dropping them into the right box, please click blue "Save " button.

5.4 The "Save" button will turn to Solid blue from Pale, which means your settings are saved; also, you should be able to see the BACnet ID of each parameter.

5.5 Click " Back"

6) Click Device Config--> General; Click " Save Configuration", and wait until web interface shows the "Configuration save successfully".



7) Device Config--> NetWork

7.1 Change DHCP to Static

7.2 input Static IP, Subnet Mask, Gateway, Name server1, and click "Save Configuration"

Data

Data
Download
Erase
Customize

State

General
Network
Remote Access

Device Config

General
Network
Remote Access
Users

About

General
Powered by
History
Links

Configuration: Network

LAN Configuration

LAN configuration mode Static

LAN IP address Static IP

LAN netmask Subnet Mask

Gateway Gateway

Nameserver 1 Nameserver 1=Gateway

Nameserver 2

LAN MTU 1492

HTTPS port 443

Remote Access port 7053

IP Recovery Yes

Save configuration

After click "save configuration"
DL3 will restart in order to apply the information

Home Live Logout



Data

Data
Download
Erase
Customize

State

General
Network
Remote Access

Device Config

General
Network
Remote Access

Configuration: Successful

Configuration saved successfully! It will be applied after a restart.

Restart now

Back to configuration

After click "Restart Now", the DL3 will take a few minutes to restart itself.

7.4 Click "Restart Now", the DL3 will automatically restart itself and this process takes a few minutes. After it restarts, please hold the middle button on DL3, and check Settings--> Network--> LAN. You will see **Auto Configuration--No, static IP and subnet mask.**

7.5. Please repeat Step 6) above.

8) Connecting the RJ 45 cable from computer to BACnet/IP port, the device and all parameters selected should be able to show up on BACnet Interface.

Up to here, set up procedures are completed.

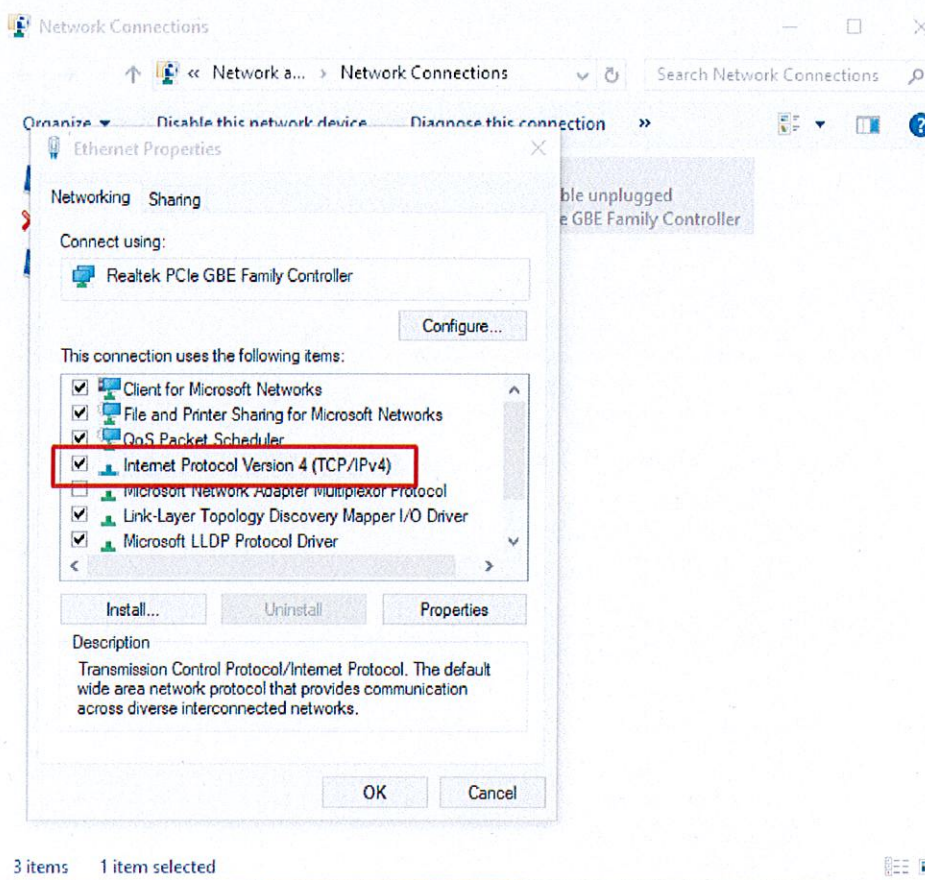
Tips:

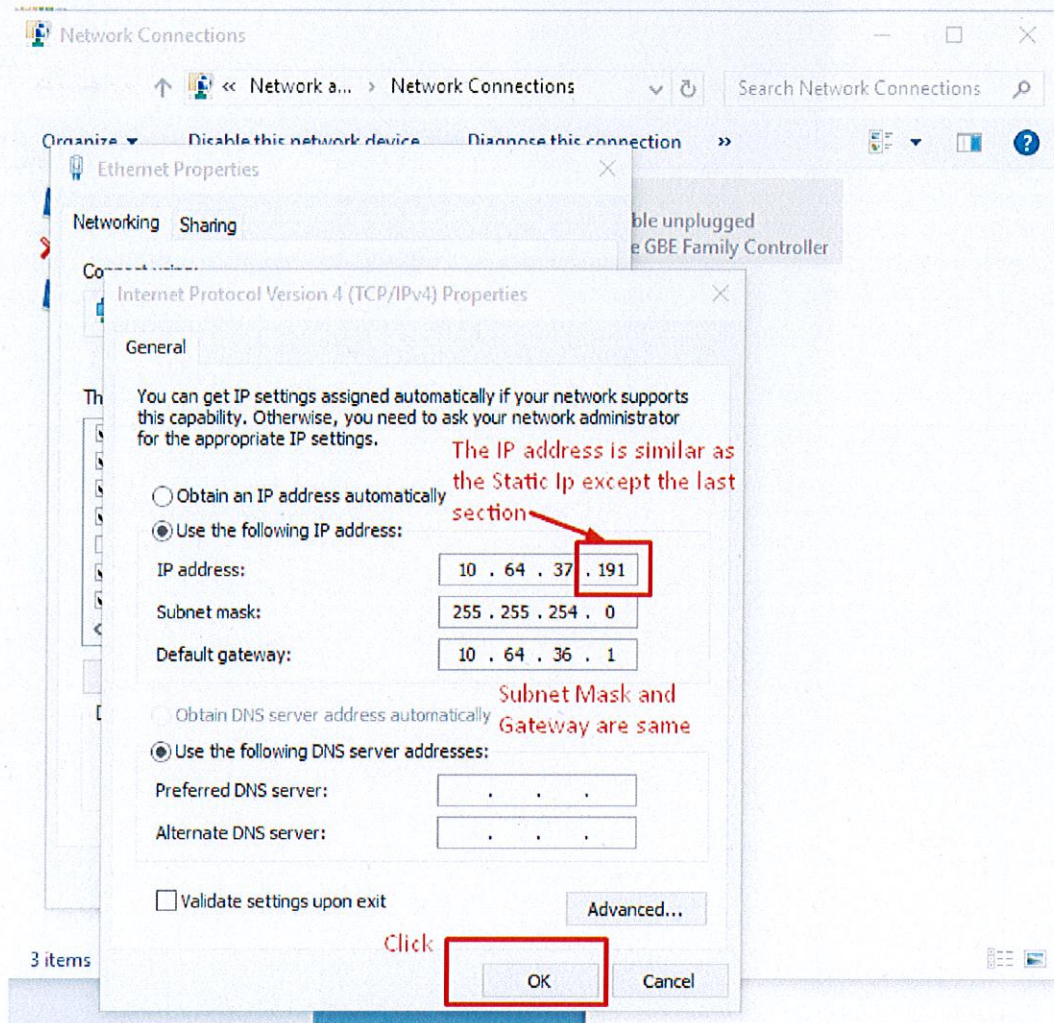
Tip-1 How to still work on DL3 web interface after Static IP is set up?

Connecting the DL3 to computer--> Take Win 10 as an example

Settings--> Ethernet--> Change Adaptor Options--> Right Click the Ethernet (the icon is two PCs)

--> Select Properties--> Double Click the content in the red box





Click "OK" right below and also Click "OK" at previous window: Ethernet Properties.

Then, input the Static IP of DL3 into a browser, you should be able to access to DL3 web interface.

(Please do not use IE explore)

Tip 2-How to check if parameters are successfully moved to the right box (step 5).

1) Paying attention to the Blue "save" button. Make sure it turns from Pale to Solid Blue.

2) Click "Back" Button right beside the blue "save" button.

3) Click "show list of assigned BACnet IDs" and see whether all the parameters are still stably in the right box.

BACnet: List

Device name	VBusBACnetServer
Device description	RESOL VBus-to-BACnet Server
	save back

After Click Back, you will go back previous page and then click

Configuration: Remote Access

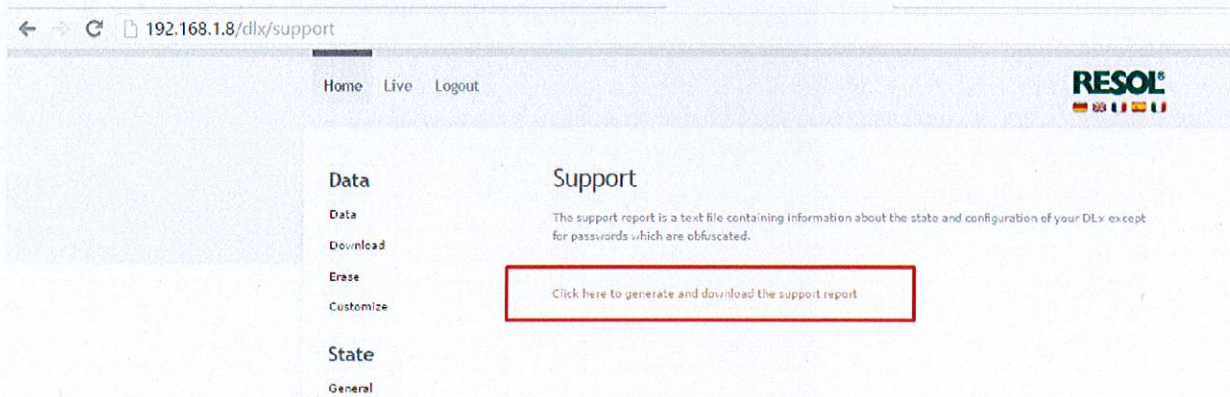
- › Access VBus over local network
- › Remote access over Internet
- ▼ BACnet access
 - Enable BACnet access?
 - BACnet address
 -
 -
 - EDE file
 - Multistate values

Check whether all parameters in the right box are still there?

Tip-3 Collect EDE file and Support Report File.

When you meet any troubles, please do not leave job site without these two files.

Open a browser and type in : IP address/dlx/support, for example: 192.168.1.69/dlx/support and click the link to download and collect the support report file.



Configuration: Remote Access

► Access VBus over local network

► Remote access over Internet

▼ BACnet access

Enable BACnet access? Yes ▼

BACnet address 3020670

Save configuration

Show list of assigned BACnet IDs

EDE file

Multistate values

Download and Collect EDE file.