



# APPLICATION NOTE

## APP #085-B

# Programming a MCS-BMS-GATEWAY-N54

A BMS GATEWAY is needed to support the protocols, BACnet MS/TP, Johnson N2, Modbus RTU to Modbus TCP/IP

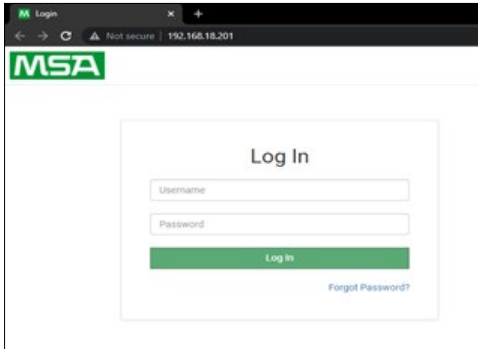


### What's Needed:

- A. **Field Server Toolbox program installed on a computer (download from MCS WEBSITE)**
  - B. **An Ethernet Cable. (crossover cable is only required when connected from gateway to MCS-MAGNUM)**
  - C. **CSV files created from the MCS-MAGNUM Controller CFG.**
1. Connect PC to a powered BMS-GATEWAY-N54 with an Ethernet Cable.
  2. Open Field Server Toolbox Program. (If running program for the first time click on **'DISCOVER NOW'**, **unclick when closing program**). The MCS-BMS-GATEWAY-N54 you're connected to will show up on the top line giving you the IP address and MAC address. Also you may need to right click and run as Administrator if the Gateway did not show up.
  3. Look at **CONNECTIVITY** column lights,
    - a. **If Blue, it is a NEW CONNECTION**
    - b. **If GREEN, click Connect**
    - c. **If YELLOW, it is not on same network so go do 3a**

## SETUP WEB SERVER SECURITY

1. Enter the IP address into a web browser (found on the label of the MCS-BMS-Gateway-N54). Enter the Username (default is “**admin**”) and the Password found on the label.



***A user has 5 attempts to login then there will be a 10 minute lockout. There is no time out on the Field Server to enter a password.***

### Diagnostics & Debugging

2. Click the **Diagnostics and Debugging** button near the bottom.
3. Click **Setup** on the left Navigation bar.
4. Click **File Transfer**.
5. Click the **Configuration** tab, then click **Choose Files**.
6. In **Pop Up file browser**, navigate to the saved CSV files, select **Config.csv** and click open.
7. Click **Submit** and then **System Restart**. **System Restart must be done after each .csv file is loaded.**
8. Select the **Web\_config.csv** file and click open.
9. Click **Submit** and then **System Restart**. **System Restart must be done after each .csv file is loaded.**
10. Select the correct BMS protocol file, then click open.
  - a. filename\_bac.csv per BACnet IP to BACnet MSTP
  - b. filename\_n2.csv per BACnet to Johnson N2
  - c. filename\_mod.csv per Modbus RTU to BACnet IP
  - d. filename\_modbac.csv per Modbus RTU to BACnet MSTP
11. Click **Submit** and then **System Restart** to reboot the BMS GATEWAY card and refresh the web browser.
12. Close the web browser and the Field Server Toolbox.
13. Reconnect the BMS GATEWAY card to the MCS MAGNUM and have the building management system discover the card.

### Note 3a

***You need to setup your PC to the same network as the BMS Gateway.***

1. Type in ‘**ncpa.cpl**’ in the task bar search field.
2. Right click on **Local Area Connection** and left click on **Properties**.
3. Double left click on **Internet Protocol Version 4 (TCP/IP v4)**.
4. Select ‘**Use the following IP address**’ and enter a static IP address on the same subnet. With the last number being different than the Gateway(192.168.18.xx)
5. Click **OK**.
6. Open **Field Server Toolbox** and click on **Discover Now**. The **Connect** button should be accessible.

Any questions regarding this release, contact: [support@mcscontrols.com](mailto:support@mcscontrols.com)

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