
MOBITEK[®] MobiGATE[™]

Installation Guide for Software Developer

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1. REVISION HISTORY

EDITION	ISSUED DATE	REMARK
1 st	1 st of August, 2009	Draft release.
2 nd	21 st of December, 2009	Pictures added.
3 rd	14 th of Jan, 2010	Installation guide on USB adapter added.
4 th	13 th of March, 2011	"Device Manager" picture added PCI card installation section removed
5 th	8 th of December, 2011	Pictures of "Serial Hub" added
6 th	31 st of December, 2013	Added "SOFTWARE: HOW TO SET-UP E-NET WITH MOBI GATE"
7 th	12 th of September, 2014	New models are launched:- <ul style="list-style-type: none"> • SG-4-U • SG-4-E "INSTALLING DRIVER FOR MOBIGATE SG-4-U" added "UN-INSTALLING DRIVER FOR MOBIGATE SG-4-U" added
8 th	21 st of November, 2014	"HARDWARE: CHASSIS" revised Pictures resized
9 th	21 st of November, 2014	"CONFIGURE IP ADDRESS" added "INSTALL VIRTUAL SERIAL PORT" added "SUMMARY" added "TECHINICAL SUPPORT" revised
10 th	16 th of March, 2015	Revised "8. DATABASE – OUTBOX TABLE: SENDING SMS" <ul style="list-style-type: none"> • added new row "datetime_schedule" into table
11 th	16 th of May, 2015	Revised "INSTALLING DRIVER FOR MOBIGATE SG-4-E"
12 th	29 th of July, 2015	Picture of reset button of SG-4-E was added
13 th	11 th of November, 2015	<ul style="list-style-type: none"> • Added <i>a) turn off the switch labelled "C/A" to turn off the power</i> • Revised "INSTALLING DRIVER FOR MOBIGATE SG-4-E" • Revised "CONFIGURE IP ADDRESS" • Revised "INSTALL VIRTUAL SERIAL PORT" • Removed "SOFTWARE: SMS ENGINE" • Removed "SOFTWARE: SMS ENGINE MONITOR" • Removed "DATABASE"
14 th	13 th of November, 2015	<ul style="list-style-type: none"> • Added "Ms. Nur Shafiqah binti Muhamad Baharum, Degree in Computer Science (Artificial Intelligence), National Defence University of Malaysia" • Amended picture of IP address
15 th	8 th of February, 2018	Revised the "Installation Guide" to reflect the new model, "SG-B-8-L-W"

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5. ACKNOWLEDGEMENT

We like to extend our appreciation to the following persons for contributing to this manual:-

1. Ms. Teh Yee Looi, B. Eng. (Hons.) Communication & Electronic Engineering, UCSI University
2. Ms. Shuba Shini, Diploma in Information Technology, Kolej MASA
3. Ms. Sarini Binti Mohd Nur, Diploma in Information Technology, Kolej MASA
4. Mr. Muhamad Fierdaus, National Defence University of Malaysia
5. Ms. Nur Shafiqah binti Muhamad Baharum, Degree in Computer Science (Artificial Intelligence), National Defence University of Malaysia
6. Mr. Mahdlurin Yahi Bin Djanadi, Diploma in Information Technology, Kolej MASA

6. PACKAGING

The contents of the package consist of:-

1. 1U chassis with 8 or 4 modems
2. 8 or 4 antennas
3. 1 power cable
4. 1 USB thumb drive
5. LAN or USB cable

7. INSTALLATION

The will be 2 parts:-

1. Hardware – [Chassis](#)
2. Driver for [MobiGATE Model SG-B-8-L-W / SG-B-4-L-W / SG-B-8-L / SG-B-4-L](#)

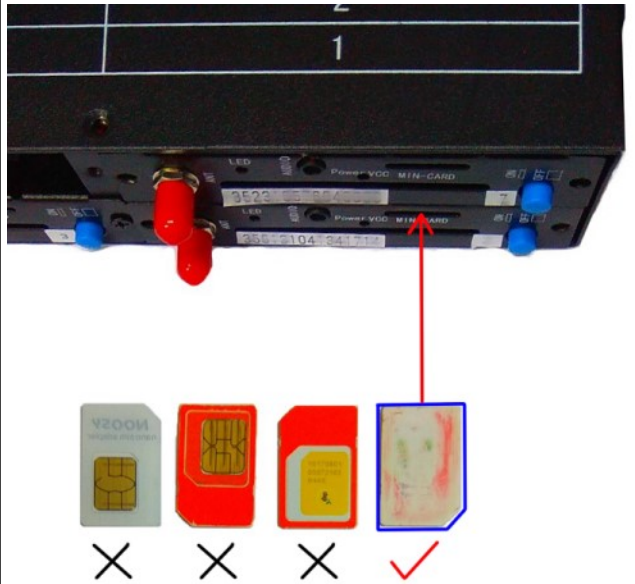
HARDWARE: CHASSIS OF MOBIGATE

<p>1. Connect the power cord.</p>	
<p>2. Connect the LAN cable into LAN port</p>	
<p>3. Switch on the power.</p>	

4. Connect the antenna to the modem.



5. Insert SIM cards into each channel/modem. If necessary, disable SIM lock before inserting SIM cards.
Warning: Please make sure that the SIM card position is correct



6. On each modem, turn on switch (blue button) to power up the modem. Make sure the blue LED is blinking.



REMOVE/REPLACE THE MODEM BOARD

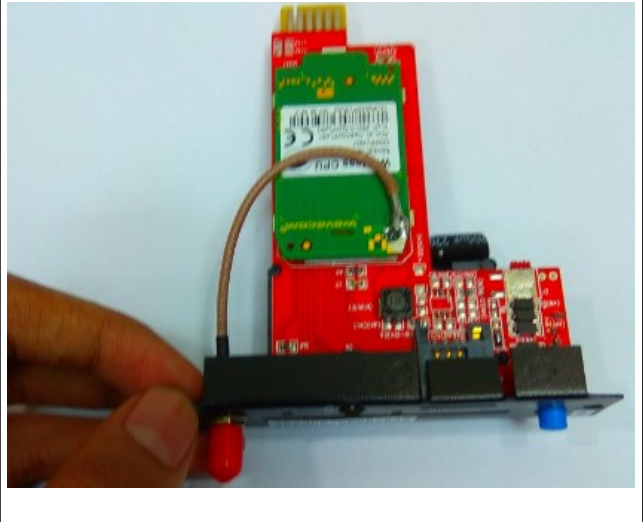
Remove 2 screws on left and right of the modem board.



Pull out the modem board by holding the antenna connector (red knob).



Store the modem board in safe place.
 Warning: Do NOT touch the printed circuit board (red area). Only touch the metal plate (black).

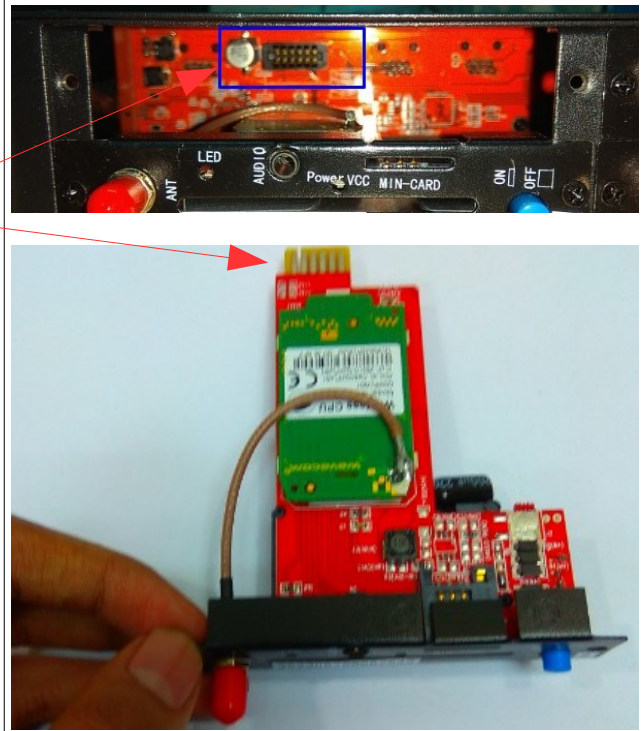


Take another modem board.

Hold on to the antenna connector (red knob) and slowly insert the modem board into the slot.

Align the modem board connector (gold) with socket (black), push the board in firmly.

Screw on both sides.



The above instruction is available on on-line video at <https://mobitek-system.com/blog/2016/06/how-to-remove-and-replace-modem/>

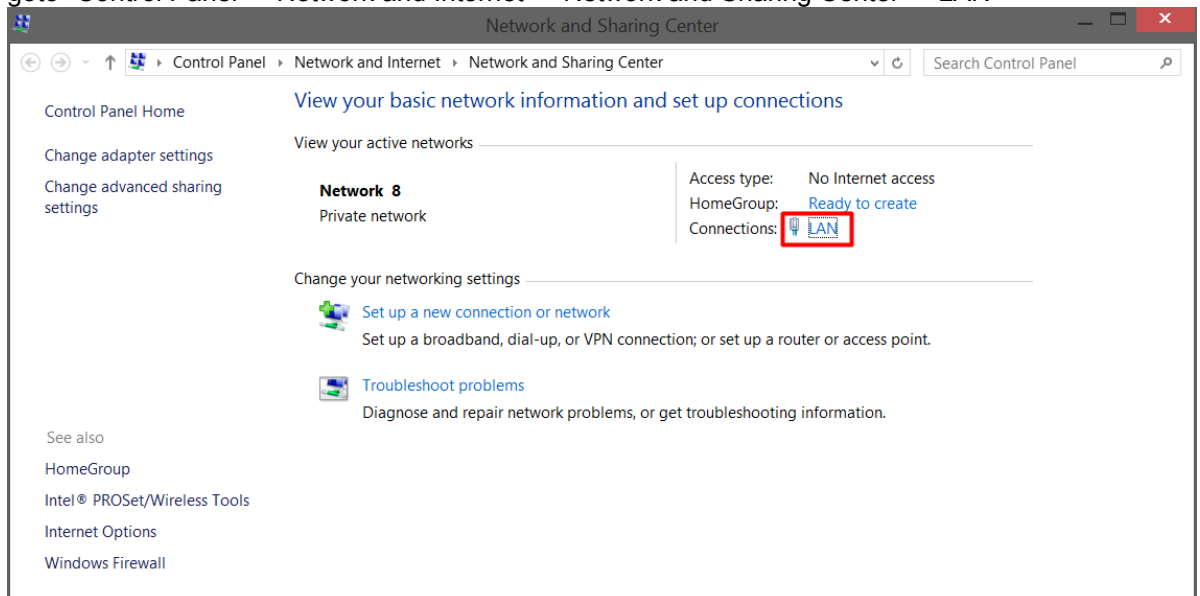
INSTALLING DRIVER FOR MOBIGATE SG-B-8-L-W / SG-B-4-L-W / SG-B-8-L / SG-B-4-L

There are 4 parts:

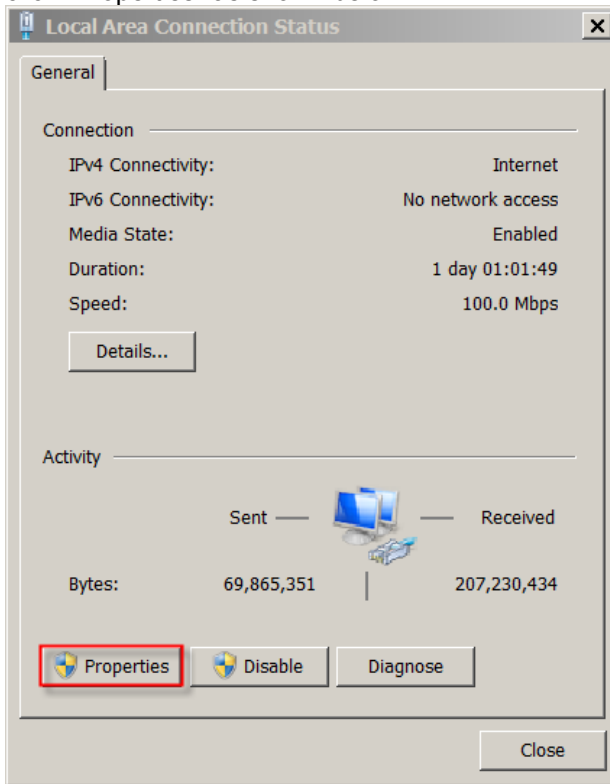
1. Configure the IP address of MobiGATE:-
 - (a) to change the default IP address of MobiGATE to IP address that is on your local area network.
2. Install virtual serial port and configure virtual COM port on PC/Server:-
 - (a) to map the MobiGATE's IP address and port with PC/server's COM port.
3. Reset the IP address of MobiGATE:-
 - (a) to change the current IP address of MobiGATE to default IP address.
4. Search the current IP address of MobiGATE:-
 - (a) to search the current IP address of MobiGATE that is connected to your PC.

CONFIGURE IP ADDRESS

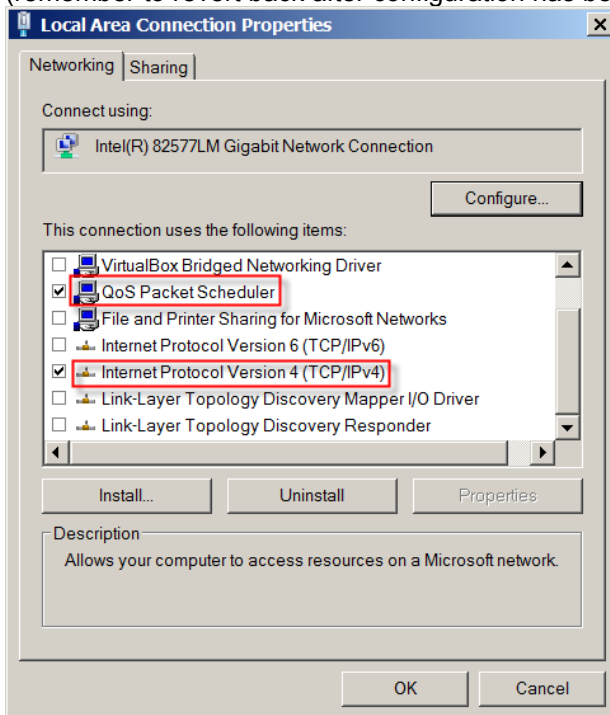
1. The default IP address of MOBIGATE is either **192.168.0.233**. Should you wish to reset the IP address of MobiGATE back to its default address, then refer to [this section of the guide ...](#)
2. If the IP address has been changed, then the new address should be labelled on the MOBIGATE itself or refer to [this section of the guide to search for the IP address of MobiGATE ...](#)
3. Use a ethernet cable, connect MobiGATE's LAN port with your PC/Server/Laptop directly. So that you are able to access the configuration menu of MobiGATE to change its IP address.
4. However, first you need to change the IP address of your PC/Server/Laptop:-
 - a) goto "Control Panel -> Network and Internet -> Network and Sharing Center -> LAN"



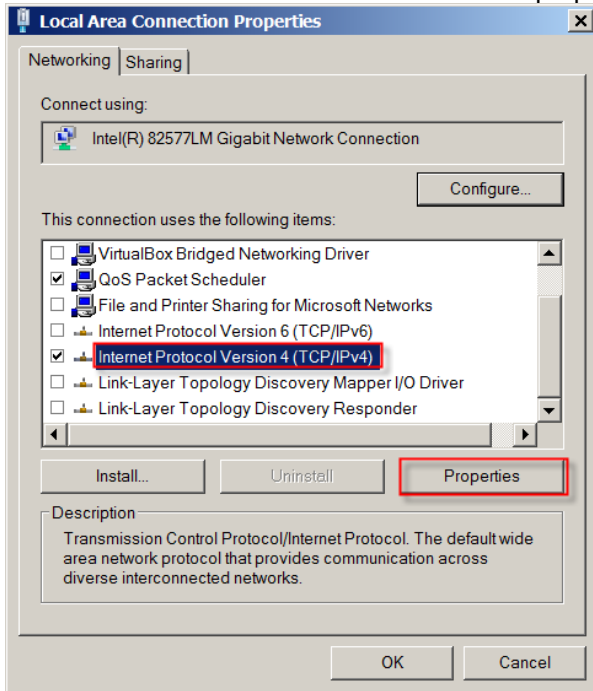
b) click "Properties" as shown below



c) uncheck all except "Internet Protocol Version 4" and "QoS Packet Scheduler" as shown (remember to revert back after configuration has been successfully completed):-



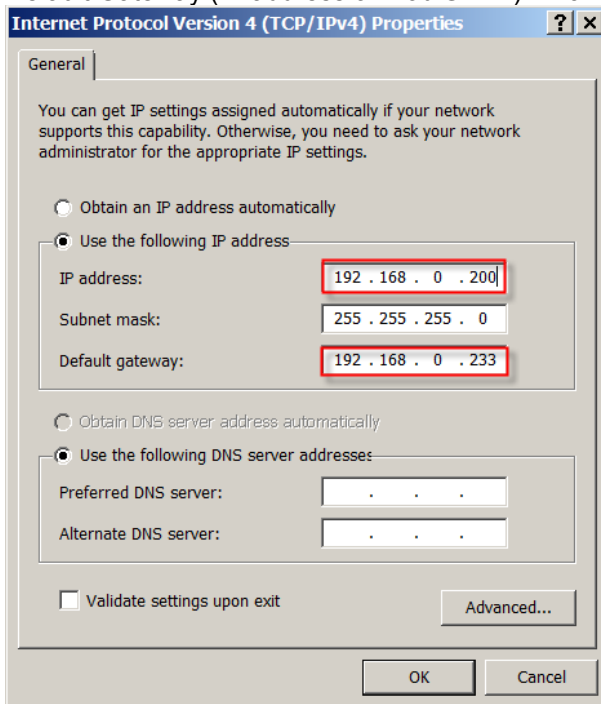
d) Click on "Internet Protocol Version 4" and its properties.



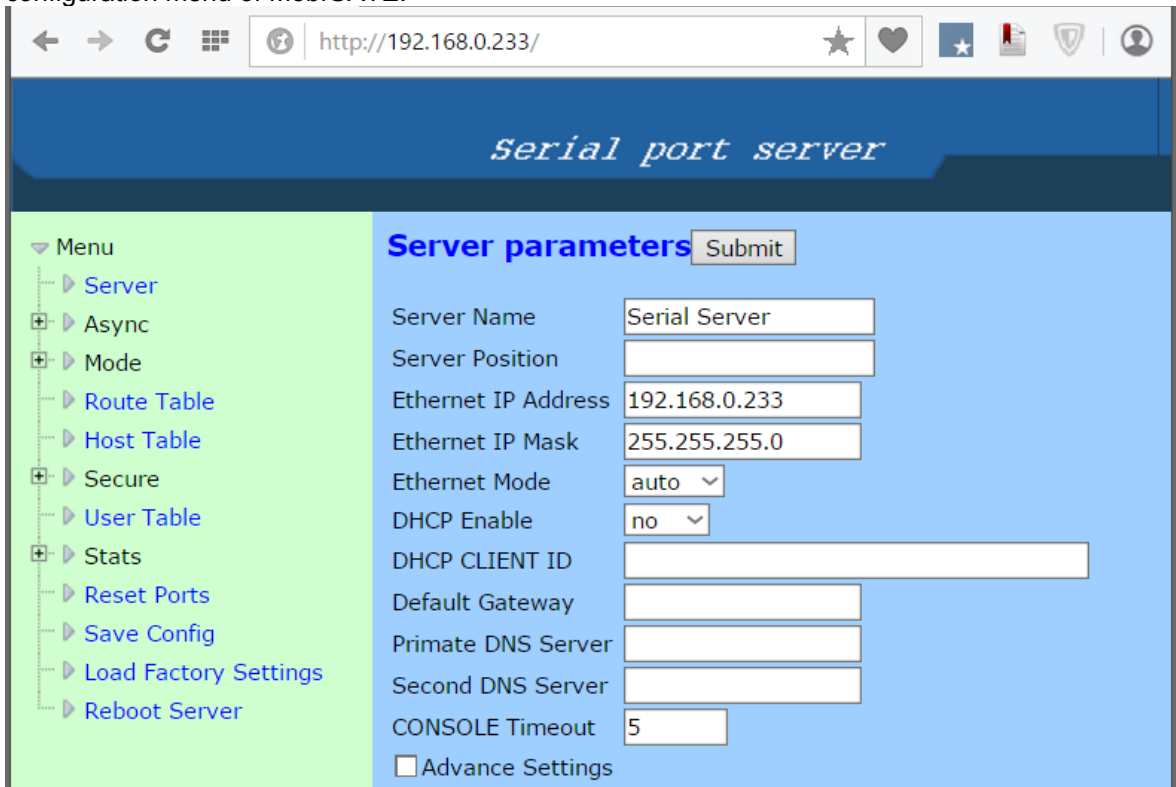
e) IP address (so that your PC/Server/laptop and MobiGATE are on the same LAN) = 192.168.0.200

f) Subnet Mask = 255.255.255.0

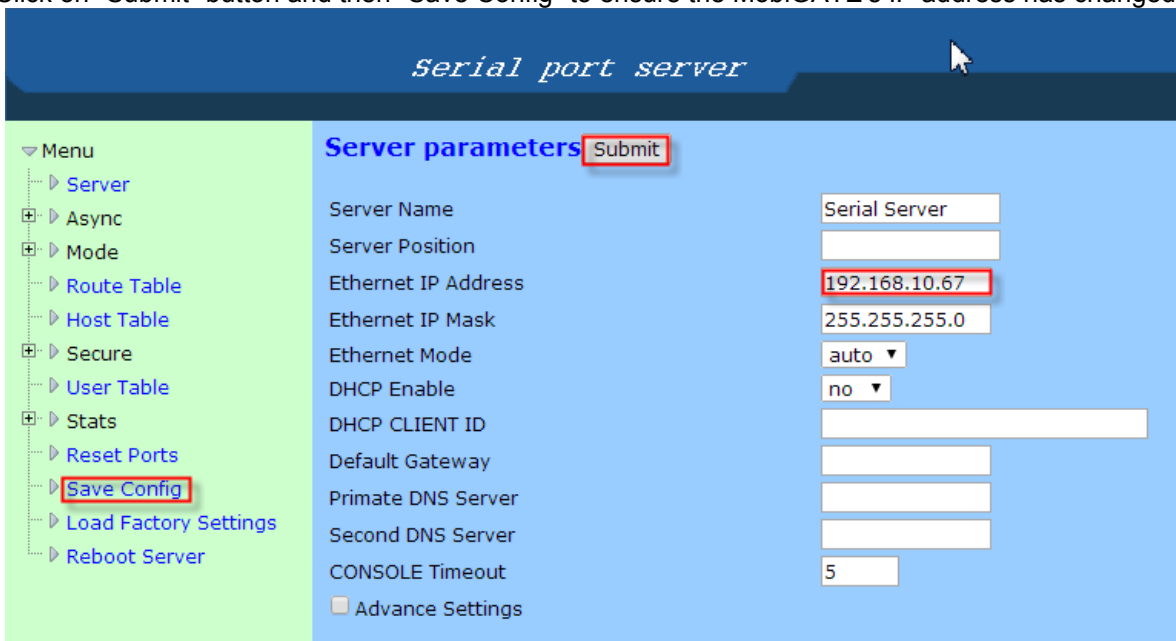
g) Default Gateway (IP address of MobiGATE) = 192.168.0.233



- Open web browser in your laptop, and type "192.168.0.233". Your web browser will show the configuration menu of MobiGATE:-



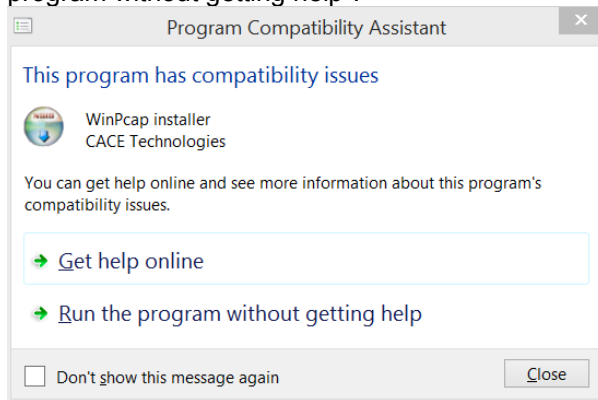
- Change the IP address of MobiGATE from 192.168.0.233 to the one that matches your existing LAN, e.g. 192.168.10.67
- Click on "Submit" button and then "Save Config" to ensure the MobiGATE's IP address has changed:-



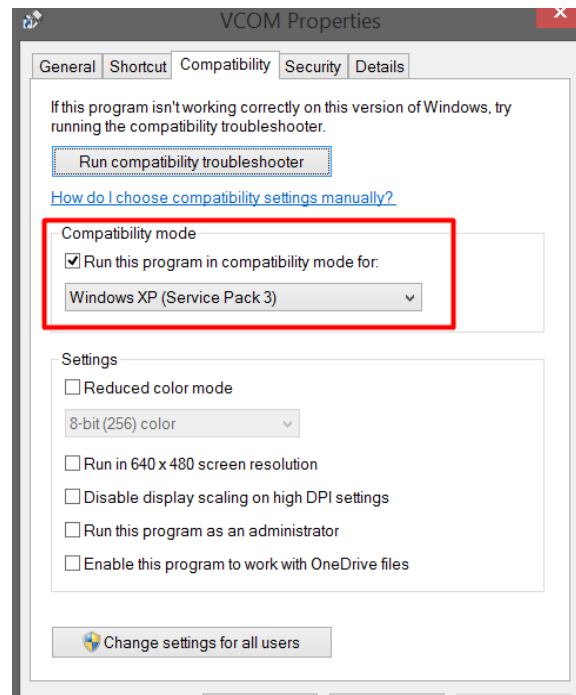
8. Connect MobiGATE to your router or switch via ethernet cable, your router or switch should be 192.168.10.1 (Default Gateway).
9. Restore the LAN properties and IP address of your PC/server/laptop back to its original (by selecting "Obtain an IP address automatically"), connect your PC/server/laptop to the router or switch via ethernet cable.
10. On your browser, enter the new IP address of MobiGATE, e.g. 192.168.10.67, and you will see the configuration menu of MobiGATE.
11. Next, you need to install "VCOM" in order to add COM Ports and assign COM Port numbers to MobiGATE.

INSTALL VIRTUAL SERIAL PORT

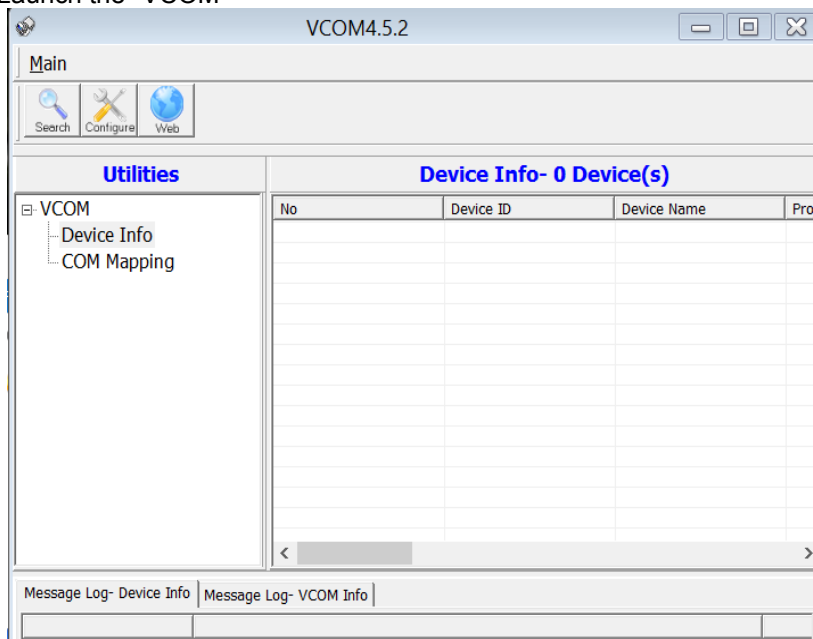
1. The following steps assume that the same IP address of MobiGATE is **192.168.0.233**.
2. Run the installer "vcomsetup4.5.2.exe" to install "VCOM" which is a COM port mapping software.
 - a) for Windows 7 and above, run it as "administrator"
 - b) "VCOM" support these OS:-
 - Windows 7, 8, 10, 32-bit and 64-bit
 - Windows Server 2008, 2012, 2016, 32 bit and 64-bit
 - for more information, refer to <https://mobitek-system.com/blog/2018/01/mobigate-supports-windows-10-server-2012-and-server-2016/>
3. During the installation, if you encounter "This program has compatibility issues", then click "Run the program without getting help".



- o Goto "C:\Program Files (x86)\VCOM\VCOM\vcom.exe", right click on it, select "Properties → Compatibility → check "Run this program in compatibility mode for Windows XP (Service Pack 3)"

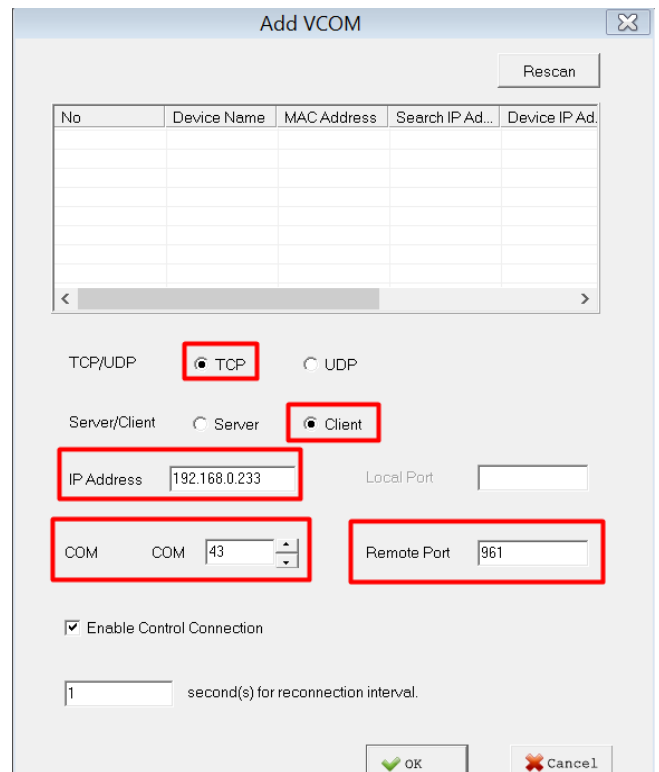


4. Launch the "VCOM"

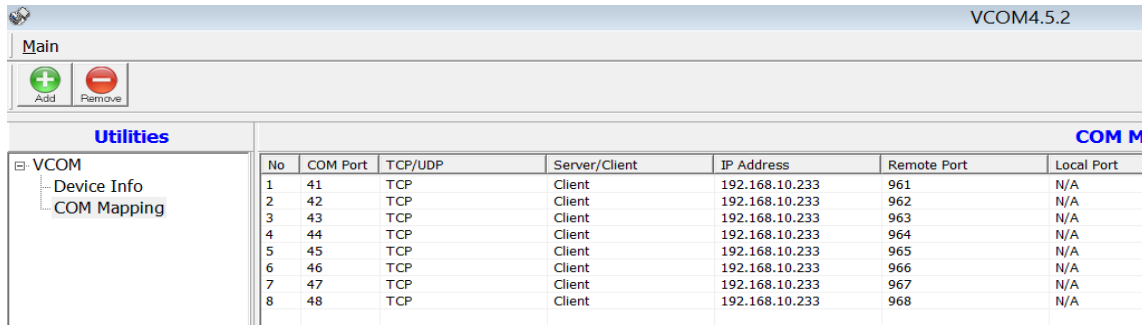


5. Goto "COM Mapping", click "Add" and enter these values:-

- o IP Address = 192.168.0.233
- o COM = (select any number that is not in used)
- o Remote Port = 961 (the modem no. 1 must be "961")



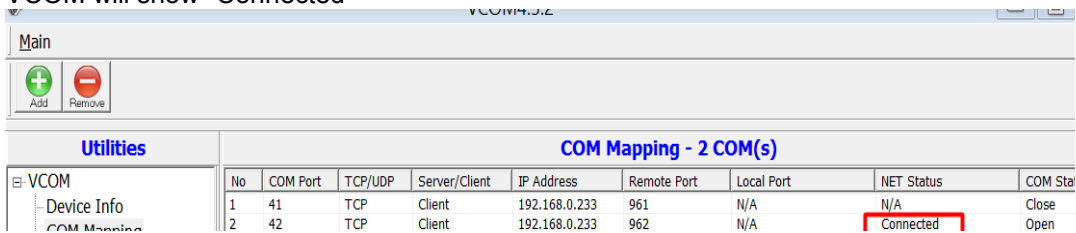
6. Repeat the above step until all the 8 modems are added and mapped according to the figure and table below:-



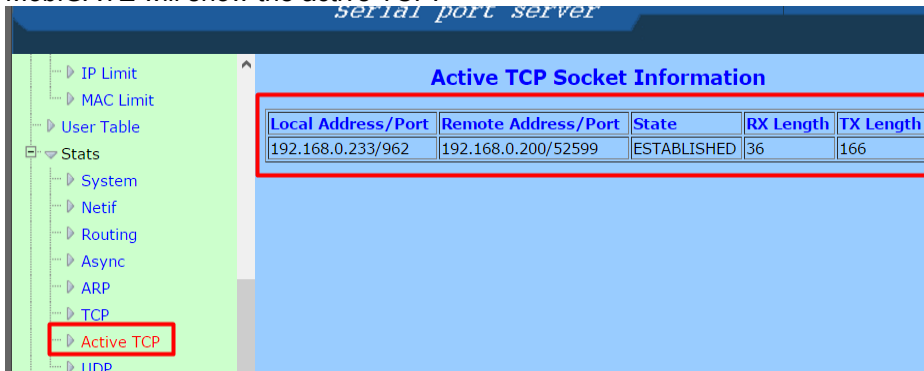
Modem no.	IP Address	COM Port	Remote Port
1	192.168.0.233	41	961
2	192.168.0.233	42	962
3	192.168.0.233	43	963
4	192.168.0.233	44	964
5	192.168.0.233	45	965
6	192.168.0.233	46	966
7	192.168.0.233	47	967
8	192.168.0.233	48	968

7. To test the connection, use "Hyper Terminal":-

- o VCOM will show "Connected"

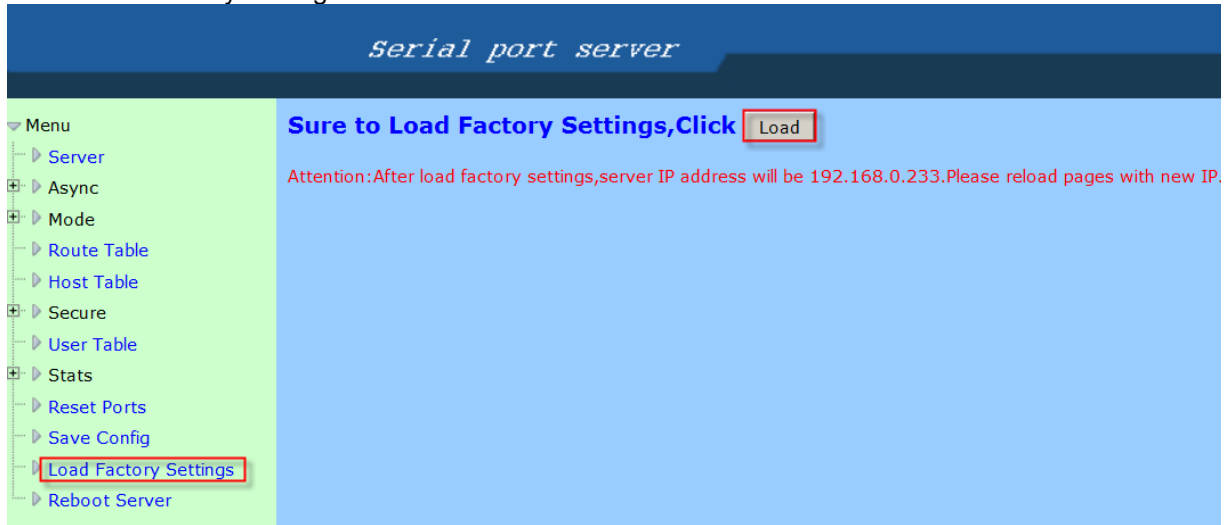


- o MobiGATE will show the active TCP:-



RESET IP ADDRESS

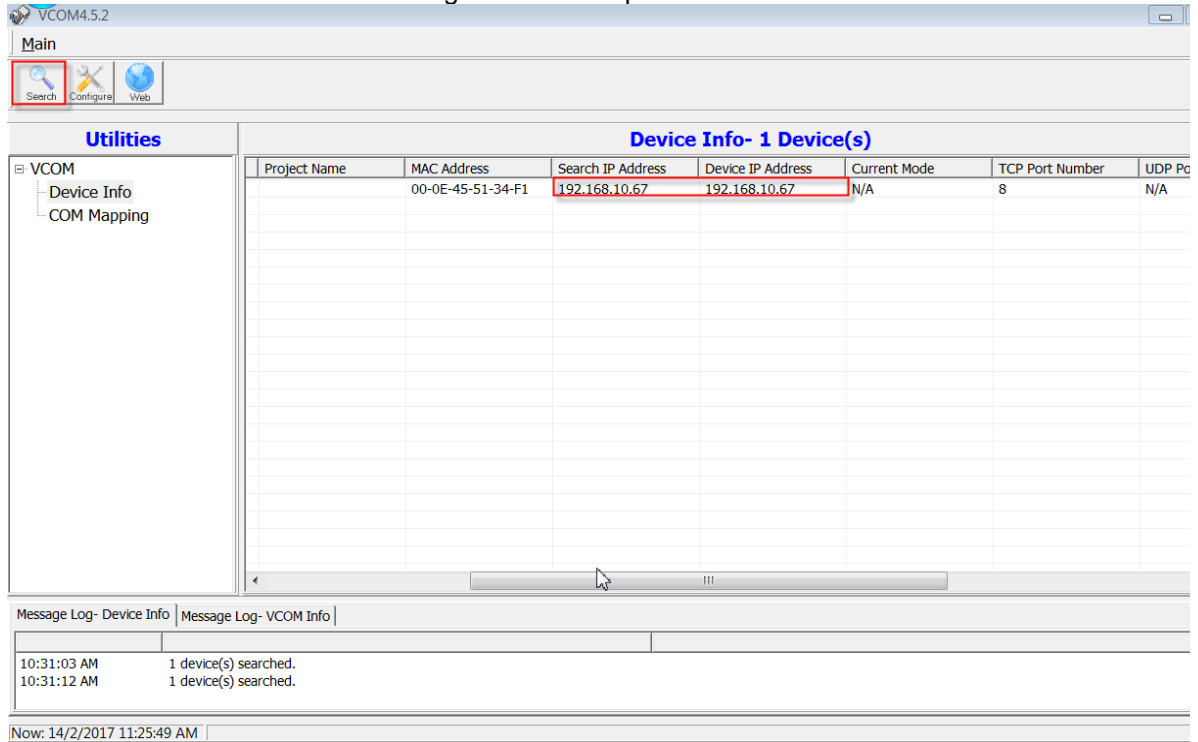
1. Use an ethernet cable to connect MobiGATE's LAN port with your local area network.
2. Open a web browser in your PC/server/laptop, enter the current IP address of MobiGATE.
3. Click "Load Factory Setting" and click "Load" as shown below.



4. The IP address of MobiGATE has been reset to its default IP address at **192.168.0.233**.

SEARCH CURRENT IP ADDRESS

1. Connect the MobiGATE with PC using LAN cable. Open "VCOM" and click "Search" button.



2. It will display the current IP address of MobiGATE, in this example it is **192.168.10.67**.

8. TECHNICAL SUPPORT

Please write to support2010@mobitek.com.my and include these:-

1. Company name: (as stated in the invoice)
2. Invoice number: (can also be obtained from the white label located at the back **and top** of the product; for the reasons, please refer to <http://mobitek-system.com/blog/2014/09/why-invoice-number-is-required-when-requesting-for-support/>)
3. Description of problem: (please fill in)
4. Attach log file (located at "C:\Program Files\SMS Engine Enterprise Edition\log")
5. Attach "config.xml" file (located at "C:\Program Files\SMS Engine Enterprise Edition\")
6. Attach screen capture